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ARTICLE I.—*A Few Practical Hints on Sponge Tents.* By
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(FIRST PAPER.)

It is well known that previously to the introduction of the uterine sound and the sponge tent by Simpson (1848), the interior of the uterus was a terra incognita to us. Diagnosis was faulty and treatment imperfect. Conjoined manipulation did indeed point to the enlargement of the uterus, but the nature of its contents could not be ascertained, nor readily removed. Patients then died of exhausting hemorrhage, the result of polypi and fibroids.

The use of the sound (or its modifications, the probes of Sims and Emmet) now permits us to ascertain the direction and the length of the uterine cavity, and the relative situation of any enlargement, whilst the expansion of the uterine neck and body, by the sponge or laminaria tent, allows the introduced finger to map out the nature of the foreign substance and its attachments, and thus admits not merely of their accurate diagnosis, but of such treatment as in skillful hands is now reasonably certain in its results.

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Moreover, the sponge tent, simple or medicated, as will be shown, is highly prized, not merely as a means of diagnosis; since, by its means, granulations, hypertrophied follicles of the mucous membrane, small polypi, and fibroids, are destroyed; certain cases of mechanical dysmenorrhœa, and chronic congestions and hypertrophies of the womb, are cured; the neck of the uterus, for the purpose of removing the products of conception, is expanded; and, finally, it prepares the parts in the first stage of the induction of premature labor, for Barnes' dilators and other procedures.

It is needless to describe the mode in which sponge tents are made. From Simpson to Ellis, every magazine article and treatise on diseases of women contained a narrative of their manufacture; they are now an article of commerce, and can be found for sale in the shops.

The writer does not know whether tents, devoid of disinfecting qualities, are extensively used at present; they can, however, be found in the shops. Their disgusting odor, and the offensive putrilage emanating from them when soaked in the discharges of the uterus, render them disagreeable to physician and patient, as well as to the latter, by reason of possible pyæmia, dangerous. This has always been considered a drawback in their use. Practical men have regretted their indispensability whilst prizing the advantages gained by their use.

Therefore such tents should be discarded when others may be had, which contain a disinfectant, such as carbolic acid, permanganate of potassa, etc. Those made after the formula of Ellis, by having threads saturated with carbolic acid passed through the centre of the sponge, certainly are admirable; and if, after their insertion, a suppository of cotton wool, saturated with glycerine, is placed on the os uteri, as first recommended by Sims,* no fetor is perceptible either in the sponge or cotton wool when withdrawn; the putrilage generally emanating from the discharge of the uterus, and which is otherwise found in the vagina, is likewise absorbed by the cotton wool; and this, at most, has a musty smell. Occasionally, when a tent has not been sufficiently charged with carbolic acid, the odor is not entirely set aside, but it is so much modified by the glycerine that it cannot be distinguished by the patient, nor is it annoying to the practitioner.

* Clinical Notes on Uterine Surgery; T. Marion Sims, fol. 50.

The profession is greatly indebted to Robert Ellis, who, in 1867, introduced the carbolized sponge tent into practice,* for now the only objection to their use is removed.

Nos. 1, 2, 3, 4, 5, being respectively 1 inch, 1 1-4, 1 1-2, 1 3-4 and 2 inches,† are best adapted for the treatment of chronic uterine disease; for expanding the canal of the cervix, and for the removal of small polypi; but when the uterus is much enlarged by polypi or fibroids, Nos. 6 and 7 of the size of 2 1-4 to 2 1-2, and even larger sizes, are indicated. For large fibroids, it is best to use laminaria tents, in the manner to be described in a future paper.

The well-selected tent should be smooth, spindle-shaped and conical, so that it may adapt itself to the canal which it is to dilate; its calibre must also be suitable to the case for which it is intended, for a tent which is well adapted for one is unfit for another variety of cervix uteri. Neither must it be too long, for then it will impinge on the fundus uteri; in either case irritation and pain are likely to be the result of the introduction of a badly-fitted tent into the cervix by main force. It should, moreover, be perforated at its base for half an inch or an inch, for the purpose of its transfixion by the sponge-tent carrier; and, furthermore, the obnoxious string of the commercial sponge tent, which is found at its base, and by which it is intended to be removed from the uterine cavity, should be separated.

The physician should always have a number of tents of all sizes on hand, whenever he proceeds to their selection, for introduction. For the successful introduction and removal of sponge tents, the following instruments are requisite:

- a. Sims' or Nott's speculum.
- b. Sims' hook or Nott's vulsellum.
- c. Emmet's probe.
- d. Nott's dilator.
- e. A sponge-tent carrier.
- f. A uterine spring forceps.

The instruments under the captions *a, b, c, d*, have been described in previous papers, to which the writer refers. The sponge-tent carrier of Barnes, Hicks and Ellis, is a round malle-

* *Lancet*, Sept. 7, 1867, page 295.

† The enumeration of H. Aveling. *Obstetrical Transactions*, Vol. 9, 1868, p. 267.

ble copper wire, eight inches in length, over which is pushed a tubular brass slide, exactly like that which is used with Emmet's applicator: this slide serves, when the wire is inserted into the extremity of a tent, to propel it into the cervix uteri.

The uterine spring forceps is used for the removal of the expanded tent from the os uteri. The tent is grasped by the forceps; a slide, propelled by a button on the side of the instrument, closes it. This self-retaining forceps holds the sponge until it is removed.

Lastly, but not least, a proper table or bed are essential to the success of this, as well as every other pelvic operation.

The writer will, therefore, give a few useful hints in regard to the table or bed most practical for this purpose, and will likewise add (as it is closely allied to the subject) the manner of making the ordinary pelvic examination, as this must precede the introduction of the sponge tent.

Whilst in office practice, Sims' chair, as described in his work, is the best that can be used, in private houses, a kitchen table, twenty-eight inches high, covered with a blanket or quilt, is preferable to the bed or couch, for it may be moved wherever the best light may be had, and it also permits the operator to sit comfortably whilst performing almost any operation. In many bed-rooms these advantages cannot be had, and even if light is present, the practitioner will have to kneel whilst operating, which is fatiguing.

Should a bed be used, it will be essential to place a leaf of a table or an ironing board under the mattress or blanket, to secure a non-yielding place for the pelvis, for non-success is almost certain where the pelvis buries itself in feathers or a resisting mattress.

Should a table be used, place a chair at its foot, the patient will mount it, sit on the edge of the table with her feet resting on the chair. She is then covered with a sheet, the practitioner supports her back whilst she lies down on the table; he lifts up her feet and places them on its edge, removes the chair, and sits immediately facing her covered pelvis. No assistant is necessary. Now let the practitioner take hold of the lower end of the sheet (which should always be of sufficient length to permit the patient to cover her face, should she desire to do so), state to his patient that her person is protected, and bid her to draw up her linen towards the upper part of her person. This will prevent exposure whilst the patient is obeying his injunction. (All kinds of fumbling by the practitioner about his patient's body linen is indelicate).

Having taught the patient to relax her abdomen, partly by gently expelling the air from her lungs, partly by drawing the abdominal parietes and contents towards the spinal column by a voluntary effort, the practitioner proceeds with the external examination of the abdomen; the examination per vaginam by the touch; the consentaneous examination with one finger in the vagina, the other hand externally; the introduction of Nott's speculum, and every succeeding step; all these are performed under cover. The examination of the abdomen and the pelvis by the touch are made whilst the physician is standing at the side of the patient; the introduction of the speculum whilst he is sitting.

Tents are introduced in the following manner: The patient having been placed either in the semi-prone position, or on the back, we ascertain the direction of the uterus by bi-palpation; introduce Sims' or Nott's speculum; steady the womb by Nott's vulsellum or Sims' hook; bend Emmet's probe, and introduce it into the uterus, ascertain therewith its length, sensibility and calibre. This is followed by the introduction into the os uteri of Nott's dilating forceps, which is gently expanded if necessary; not for the purpose of dilating the cervix, but in order to ascertain the *thickness* of the sponge tent to be introduced, just as the previous introduction of Emmet's probe has taught us the *length* of the tent to be selected.

This information thus gained will permit the proper selection of the tent, which must be freed of the string which is tied to its base. Bend the sponge-tent carrier to the exact curve of the cavity of the neck, push it into the orifice at the base of the tent (this will secure the tent to the carrier), moisten the tip of the tent with a solution of soap, and whilst steadying the womb with the left hand with the vulsellum or hook, insert the tent thus secured, with the right hand, gently into the neck, until all but a quarter of an inch has entered. Now drop the vulsellum, which, being self-retaining, remains in situ; then with the left hand, thus freed, push the brass coil or slide towards the neck of the uterus, while you withdraw the sponge-tent carrier. This movement results in lodging the sponge tent in the neck of the womb. All this must be accomplished without producing pain; nay, more, if the sponge tent causes inconvenience, pain or vomiting, it must be removed and a smaller one inserted, else mischief results. A suppository of cotton, saturated with glycerine, is then inserted into the vagina; a suppository of

morphia and belladonna is also introduced into the rectum; a napkin is secured by a T bandage, and the patient is ordered to bed.

A few cautions are here considered necessary, in order to avoid annoyance, insure safety, and ward off danger.

It is essential to ascertain the curve of the uterine cavity by means of the probe, else the tent will get entangled in one of the folds of the cervical mucous membrane, become saturated with fluids and rendered useless.

The uterus, in cases of flexions, should be straightened by means of probangs, armed with sponge, to render the introduction of the tent easy.

Let care be exercised that the tent be not pushed too far within the uterine cervix, else great difficulty and pain will be experienced in its removal.

It sometimes becomes necessary, owing to the non-dilatability of the internal os, which does not yield to the influence of the sponge tent, to use the knife, which is in these cases safer than metallic dilators.

The tent should be removed, if possible, the same day; Sims' rule of removing it in twelve hours is a good one, though it cannot in all instances be performed. Handled in the manner above described, they will neither produce inconvenience nor fetor, if left in situ for twenty-four hours.

Tents are introduced, and it is the constant practice of many physicians to insert them, whilst the patients are in their office. This is bad practice. Whilst it may often be done with impunity, cases will arise where misfortunes will compel the prudent practitioner to regret such a practice. Sims has described such cases, and every surgeon can add his experience in corroboration. They should never be used immediately before or after menstruation, else hæmatocele—a very frequent accident, when any operation, however trivial, is undertaken during that period—may occur. An effusion of blood into the pelvic organs may place our patient's life in jeopardy, and it will be only after many days confinement that this accident is recovered from. Cellulitis is another result of their use, if inflammation of the uterus, ovaries and tubes is present, or if the tents are too large, too frequently repeated, or too rudely inserted. Furthermore, sponge tents should not be used, when, in cases of flexions, adhesions have been formed by previous

inflammations; as peritonitis may be induced. All chances of producing abortions should be avoided, by refraining from their use, until it is positively known that pregnancy does not exist.

The frequent accidents, occurring after the most harmless manipulations in pelvic surgery, in cases where the mishaps could be least expected to take place, should admonish us to use operative procedures only when absolutely necessary, and then with great deliberation. The writer has adopted the following rules, not insisted on in the text books, which will, on trial, be found useful: In chronic uterine disease he relies primarily on general medication; when, however, certain local and sympathetic troubles continue to manifest themselves, which by general consent are considered manifestations of pelvic disease, he uses local measures in conjunction. Should improvement take place, he continues to employ local treatment tentatively, or relinquishes it for the time being, still continuing general treatment; and does not resort to manipulations unless urgent symptoms necessitate their use.

Timely local measures, followed by constitutional treatment, will often break the vicious circle of ailments, which, without pause in their local treatment would but be perpetuated. *The surest index and guide in these cases is the improvement of the health of the patient;* excoriation of the neck, a retroverted or retroflexed uterus, accompanied by pain and the nameless neuralgic concomitants, require local treatment; the same state of affairs, without inconvenience, should not be disturbed. If we act otherwise, and produce hæmatocele, cellulitis, peritonitis, etc., and confine our patient, who, previously to our being called, had attended to her domestic affairs, to her bed for weeks and months, then our professional self-respect will be debased before the tribunal of conscience, and our pockets and reputation will experience a corresponding loss before that of the public.

The removal of the sponge tent is a delicate and important task. It is performed as follows:

Place the patient on her back or side, press the posterior commissure of the vulva back towards the anus, and with forceps remove the cotton wool suppository which will be found white, moist, of a musty odor (not foul or stinking). Introduce Sims' or Nott's speculum, lubricated, not with sweet oil or cold cream, but with fluid toilet soap, (which should always be kept in an open-mouthed phial, and with which the fingers during pelvic operations

should be covered, whenever they are introduced into the vagina or rectum; for whilst it has no odor of its own, it, by its detergent qualities, purges the fingers of adhering impurities); the tent will be seen emerging from the expanded os uteri, dilated to four or five times the diameter it presented in its compressed state. Grasp it with the spring forceps, close the instrument, and leave it in situ whilst removing the speculum, by sliding it over the forceps. Now take the forceps in the right hand, introduce the index finger of the left hand into the vagina along its locked blades, let it sweep gently and firmly around the circumference of the cervix, whilst consentaneously an equally gentle rotatory movement is imparted to the forceps. This will free the sponge tent of its moisture, release the fibres of the sponge from the mucous membrane of the cervix in which it is imbedded, and leave the tent ready for removal in the grasp of the forceps.

The previous manipulations have been performed whilst sitting or kneeling in front of the pelvis; now stand on the right side of the patient, place the left hand on the abdomen, depress the uterus, whilst the index finger of the right hand is introduced into this organ; examine its interior carefully from cervix to fundus, perfect the diagnosis and perform the operation for which the uterus was dilated.

Should the cervix not be sufficiently expanded for the purposes of diagnosis and treatment, introduce another and larger tent, with the same precautions as above detailed.

In some cases the cervix does not permit the entrance of even the smallest sponge tent; here commence the expansion by a very small Bay of Fundy laminaria tent, dipped in warm water, which softens and lubricates it,* and on its removal, this may either be replaced by others of a similar kind, or a larger sponge tent.

Practically we have in this country no choice between the use of the sponge and laminaria tents; for whilst all sizes of excellent carbolized sponge tents may be procured with ease, the shops are but meagerly supplied with an imported article of the English sea tangle, which expands slowly and irregularly, and is withal to be had of a very limited range of lengths.

The Bay of Fundy tangle,† however, is an excellent means of

* Am. Journal of Obstetrics, J. C. Nott, Nov. 1870.

† For an excellent article on this subject see Nott on Laminaria Tents, above quoted.

expansion; but this again is supplied in limited quantities and lengths. Moreover, whilst it requires only one sponge tent, a fag-got of two, four or six of laminaria tents is sometimes necessary for the same purpose, and as the price of either article is the same, the tangle tent will be used only in exceptional cases.

The use of the sponge tent as a diagnostic agent has occupied the attention of the writer thus far; the therapeutics of the sponge tent will receive his attention in a succeeding paper.

ARTICLE II.—*On Abdominal or Ileo Typhus.* By CARL PROEGLER, M.D., Aurora, Illinois.

During the siege of Metz, we had quite a number of typhus cases, and I shall try to give my experience in the treatment, etc. I shall not quote the personal cases out of my diary, but give the statement in extenso.

I had over seventy cases under my special charge, twenty-eight of which were very hard cases, twenty medium cases, and the rest of twenty cases we may class under the head of febriculeuse typhus; they generally kept along for three weeks, some even could get discharged from medical treatment within a fortnight.

The whole picture of ileo typhus is so much known, that I scarcely deem it necessary to give a minute symptomatology of the cases which occurred in my wards. But every epidemic has its peculiarities, and it is these which I shall describe.

The beginning of sickness commences with higher temperature of the skin and a great rigidity of the patient experienced in all the limbs; not a feeling of fatigue or lameness, but certain muscular contractions were predominant.

Especially the muscles of the neck and back, which could not very properly be controlled by the patient; the latter did not seem to care much, and after admittance to the hospital, would like to creep about. They all did not like to lie down, and they kept sometimes six to eight days in that condition without coming under the notice of the doctor. No appetite. The tongue became to appearance alike with all the patients. The edges pale red;

the interior of the tongue was covered with a yellow gray or gray coating. The tongue moist; but it cost the patient quite an exertion to show it, and then with tremulous movement.

The expression of the countenance was languid, the eyes lost their lustre, the cheeks redder than usual. By-and-by the head grew heavy and dizzy, preventing the patients walking or going, and only these symptoms would bring them to bed.

In only four cases I noticed headache, being then the only complaint. Sometimes nose bleeding occurred, but not very often or great. Exploration at that time revealed a tumate spleen, sometimes so great that the spleen could palpably be percussed.

Abdomen not very much enlarged, and even by great pressure not very painful; and, strange, the ileo cæcal was painful with only a few. On the contrary, the patients would experience, even with slight pressure, great pain in the regio epigastrica, and around the spleen. Gargouillement was noticed many times, especially in cases with diarrhœa. The latter would not occur oftener than two or three times daily.

The feces were thin, of a dark brown yellow color, not profuse, and of pungent odor.

The pulse was, in intense cases—which I am now especially noticing—very different, ranging from 96 to 128. One very aggravated case, resulting in death, was characterized by a persistent pulse of 104.

With these symptoms the ileo typhus ripens into full bloom—dizziness greater, the expression became more apathetic, with slight delirium.

I have seen quite a good number admitted in these stages, who had done their duty up to the time, but as soon as admitted, or very shortly afterwards, all the symptoms of aggravated typhus made their appearance. Some would sigh unconsciously. One very intense case, with very early and aggravated symptoms of collapse,—where the patients for full six weeks were groaning very loud—with every expiration, like one deeply affected, sighed deeply.

I did not notice much roseola. My patients having been mostly soldiers from the rural districts, and not used to a great cultivation of the skin, it might have been that they were not early visible. Only in a few cases I could detect five or six roseola patches as large as a fleabite.

The hearing of the patients got impaired from day to day, ending in almost complete deafness, even in patients where the sensorium

was perfectly, or in a measure clear, and who were only seemingly languid and fatigued. I was obliged to talk to them very loud to make myself understood, showing that deafness in ileo typhus is a nervous symptom. The patients did not complain of anything except occasional vertigo, especially when I was obliged, for a physical exploration of the lungs, to have them sit up. The tongue got more and more dry, cracked and beefy; only the edges had a curious dark red color, and looked as if they were varnished. I saw only twice a tongue red and varnished without any coating.

The dryness of the tongue is always a good measure of the mental state of the patient; seemingly they do not know that they take too little fluid, or if they know, then they have no will to give expression to the thought and desire for fluids. Both I have noticed, and it seems justifiable to presume that the dryness of tongue has something to do with the mental derangement.

Diarrhœal discharges, like those noticed before, occurred about five or six times every twenty-four hours, and even oftener. In some cases constipation was prevalent, so that castor oil had to be employed.

Nose bleeding occurred often, and I could not help noticing that the patients after every nosebleed had a better expression, and that the sensorium became brighter. Only in two cases I noticed that the patients became paler.

Hemorrhage from the bowels I noticed in eight; all of them had an enlargement of the spleen. The same I noticed in a colleague of mine. He had a very large spleen, and perished by exhaustive nose and intestinal bleeding.

How both these symptoms were connected together, I do not dare to explain. But if future cases should develop an affinity between nasal and rectal bleeding, it would not be impossible that the changes of the blood by anatomical changes of the spleen would lead on the other side to *anomalous changes of the nutrient blood vessels*, so that they may be more easily torn. Bleeding appeared in two ways, either mixed together with the stools, giving the latter a rather chocolate color, or in thick, dark colored clots. It is very probable that the blood, especially in the last cases, comes from the lower part of the intestines. In one case I noticed, together with this hemorrhage, copious diarrhœa, coming so often that the entire bed was always drenched with the dejections. The third week showed a marked decrepitude of the patients, which I hardly ever witnessed in hospital practice before.

The *paniculus adiposus* went off with rapidity; the patients were pale, emaciated, half or wholly comatose. The countenance haggard and wrinkled, without any expression; they seemed to represent a picture of total indifference. The extremities inclined to coldness; in some cases the feet were entirely cold. Dicrotic pulse; 120 beats and above; the art. radialis not much flexed, somewhat wider; the pulse wave not very high; the sounds of the heart were dull, especially the first sound, which was cracking and hardly to be heard. It is not without intention that I describe these symptoms more closely; they gave me the basis for the therapeutic treatment, and showed that nothing is more foolish at the sick bed than to be guided by some one-side principles concerning therapeutical treatment in one and the same sickness, especially when the same develops itself in individuals who are totally different concerning their mode of living, occupation, etc. Only with the greatest of care did I succeed in warding off collapses. At the same time with the other symptoms the patients had bronchial catarrh, much coughing and tenacious sputa, tormenting the patients a good deal. Thickening of the parenchyma of the lungs in the lower parts, with a dull sound and difficult breathing; only twice I noticed lobular pneumonia. Bed sores I noticed in three cases, and not sooner than the third week; they occurred at the os coccygis, the back, and even the buttock. In two cases the sores were light; in one case the sores reached the bone, with a good deal of loss of substance.

With but few exceptions the delirium was of a mild character; sometimes a patient got out of bed and wanted to go off, but was very easily persuaded to go back to bed. There seemed to be no fixed ideas with any of the patients. It was strange how generally contented they were; if asked how they felt, they would always reply in a kind of careless manner, as though thinking others and not themselves to be affected by sickness.

On account of sickness among the employes of the hospital, I had not always sufficient assistance and could not make thermometrical observations, therefore I endeavored to discover a symptom that could quickly be discerned and that could be taken as the forerunner of recovery.

The careful physician will never depend on single symptoms, because he may be misled by every one of them. The complex of symptoms, and their relation to each other, assure diagnosis and

prognosis. The lowering of temperature may not be an indication of recovery; on the contrary, it might be rather ominous; so with the pulse, but combined together it will give a pretty good test for the patient. I only say this that I may not be accused of having followed blindly single symptoms alone.

It cannot be denied that one symptom may be worth more attention than another; and after a careful observation I noticed that in typhus the appearance of the tongue will be in some measure an indication for a change for the better with the patient.

The symptomatology of the tongue is, like a good many important signs held highly by the older physicians, not now considered of great importance. The exact physico-chemical researches made sad havoc with those merely superficial observations of the old writers of medicine, and the medical art has won generally, but not in every respect. The greater number of our modern doctors who based on physical exploration, have lost sense for the simple, unostentatious and careful observations of the sick. The physico-chemical researches come in the first line, and it being true that the diagnosis has been made sure by help of those means, there are remaining certain things, which cannot physically be proved, but which are highly important for the physician to know. Sometimes one symptom, sometimes the totality of symptoms, will be more useful for therapeutics than the proof that the limits of a pleuritic exudation have increased half an inch, the proof being in the first line important. Especially in typhus there are so many symptoms which cannot be physically, nor by the means of auscultation or percussion, nor with the help of the thermometer, explained; and I have found that the tongue in typhus was a great help to me concerning prognosis and therapeutics. The patient may feel easier in his head, the pulse may become slower, the temperature lower; all these symptoms explain the exact period in which the patient is, but are not an exact indication of the state of the patient, because sudden changes are not very seldom noticed, and the patient remains just so long in danger till the tongue has assumed quite another appearance. The signs of approaching recovery are the following:

The cracked and heavily coated tongue which is dry and sometimes immovable, so that the patient only with an effort can show it, becomes moist and has a slippery touch; the cracks loosen; and what with the extremest cleanliness by washing, etc., could not be effected, nature brings about in a few weeks.

The edges of the tongue get pale red and the middle part whitish gray; the tongue protrudes easy and does not tremble. After a little while the patient experiences some appetite, assuming by and by the character of hunger; the countenance loses its careless habitus, and the patient will now look very pale and emaciated; the eye is bright; head free; sleep quiet and long, firm; stools only once a day and thicker, with quite a normal appearance; the cough gets looser, respiration slower, and expectoration more abundant. The arteries are but slightly flexed, the artery itself narrow; pulse quiet, but rises with the slightest exertion to 120. With favorable circumstances the patient gets into the state of convalescence. In only four cases have I seen a change for the worse after the patient has been in the last described state; two went into regular typhus collapse; the fourth was taken with hemorrhage again, and I could trace his relapse to an error in diet, having received from some one a good deal of cake, and was lying for weeks almost on the point of death; he had bed sores. In the other three cases no errors in diet could be traceable. The re-beginning of the sickness commences with the coating of the tongue, dryness, etc., hot skin, tumor of the spleen, and some roseola. All four cases recovered after a sickness of four months' duration. They were respectively 20 years of age, robust and healthy individuals.

The mortality was about 16.60 per cent.

There has been so much written on the treatment of typhus, that I hardly hope to offer anything new. Only one point I consider of importance. Medicine is and ought to be remembered as natural science in the fullest sense of the word. Taking it in this sense, it requires, firstly, a precise and unbiassed study of nature; and, secondly, to try to find out by all possible means the way of nature. This must not be only a saying with professional men, but it must be truth, hence it has been with all great physicians of all ages; and there is nothing more foolish than to think, that nature can be forced to point out and shape the healing process. I do not want to be understood that I preach *nihilismus* which compares the doctor at the sick bed to an actor, but only the pressing necessities to individualize and diagnosticate every new case according to the indications. Only this point of view will help therapeutics, and only treated in this sense, it may compare favorably with the teachings of diagnosis and prognosis.

Typhus and the treatment of it has led to these remarks, because there is already a tendency to take a single symptom for the whole disease, neglecting, therefore, the individual, and treating it empirically.

Liebermeister, Hagenbach, Jurgensen, and a good many others, are of opinion that by reducing the fever by heroic means typhus will be less dangerous. The results obtained by those authors are unquestionably great, and the treatment ought to convince us of its efficacy. I had already ample opportunity to study in the different clinics, both here and in Europe, the different treatment, and was struck with the great success Traube met in the Berlin Charite Hospital. He did not use cold bathing, but only cold ablutions. Although the cooling off was not as great as by bathing, still the temperature of the body was diminished. There was general improvement—head clearer, pulse slower and fuller, expression more marked, etc.

These observations led me to adopt the same plan of treatment in a military hospital where there being such constant change of nurses I could not use the cold bath and the wet sheet. I had only two occasions to test it. I used either compresses or flexible ice bladders, changing them every five or ten minutes. They were dipped in ice water, and the patient was covered on his chest, abdomen and head with it; having detailed for that purpose quite a number of soldier-nurses. The success I met with was not very great, the patient getting lower in the second and third week, and especially the extremities became cold, the pulse slow and easy, countenance pinched and shallow, so that I had to change. The most aggravated cases showed the symptoms first. Was it that cold compresses are a bad substitute for the hydropathic treatment, or could my patients not stand cold?

Liebermeister asserts, as his observation, that moderate loss of warmth in health and fever will not cause internally the same change, but on the contrary it will give rise to a higher temperature. And only in that way can I explain the effects of my compresses. Covering only the sick part of the body, they took away only a small amount of warmth, leaving the sick process almost unchanged. For the truth of this observation I can vouch, and I think it, therefore, better not to use the hydropathic treatment if it cannot be properly applied. But certainly that will be a debatable point; it may be that those individuals could not stand the hydropathic

treatment. It must be remembered that they were soldiers and mostly French, who had endured a good deal of hardship and privation, and probably had not enough vitality in the system. It was not so much an object to suppress the fever as to feed them as much as possible.

Ex juvantibus, I draw my conclusion.

I used in the beginning: acid hydrochl., (2, 5 : 200,) and chinin, (0, 3) every two hours. For nourishment they had milk, beef tea, (but I had to change soon to strong beef tea), yolk of eggs, wine, etc., especially port and sherry wine. Chinin in small doses was continually used, and I made the observation that small doses of chinin perhaps (0, 6 : 200,) every two hours a tablespoonful, produced a tonic effect, larger doses producing less activity of the heart, and being, therefore, really anti-febrile. The pulse gets slower, even irregular, the radialis loses its flexibility, and the waves gain in height as shown by the sphygmograph. Strong stimulating remedies I used only in collapse, and especially acid benzoic (0, 12), and g. camphor, (0, 06), every two hours one powder.

In two cases I saw quite a remarkable change, patients being almost gone. We did not use musk, on account of its high price, but Traube recommends it highly. In one case only, the repeated use of musk saved the patient (the only case where musk was used), but it should be considered whether diarrhœa is present or not, as the benzoic acid would not do in the latter complication. The quintessence of the treatment consisted in good nourishing diet and heavy wines.

Hemorrhage of the bowels ought to be very carefully watched, and I can recommend highly the liquor ferri sesquichlorid. I gave it very often, every two hours in water, (5 gtt.) The bleeding stopped, and even when it occurred again it had the same effect.

For the diarrhœa I used ext. senna, strych. spirit, (0, 12 : 200), every two hours a tablespoonful, but always given with mucilaginous drinks.

For bedsores I used emplast. saponat., spread on deer skin, and permanganate of potass. (1, 3 : 120.)

ARTICLE III.—*Surgical Clinic of Prof. Gunn.* Reported by Dr. O'BRIEN.

(Inserted in place of our regular notes, which were lost by the fire.)

Saturday, Sept. 30, 1871. Case 1. Web fingers; operation. Prof. Gunn establishes a foramen at root of web, allows it to heal through from dorsal surface to palm, getting continuity of integument there, and so preventing wound from healing up from bottom when rest of web is subsequently divided; if web were simply divided and sides separated, it would fill up from bottom and with difficulty be restored.

Case 2. Miss B. Strabismus; right eye turning in. "Ascertain cause, make careful diagnosis in these cases as between traumatic and other causes." History of this case: she says she had convulsions when young; trouble not always in same eye. "We have here, then, absence of mechanical cause, so it is not cicatrix. Remember the independent nervous supply of the external rectus, it may be paralyzed; if so, let patient try to turn the eye outward and she will be conscious of no attempt of the muscle to move; experimenting with this patient she feels the muscular effort, therefore the external rectus is not paralyzed. Having excluded these conditions, our operation is clearly indicated; we now select the eye to be operated on, and shall be content with improvement; awaiting an operation upon the other eye to complete the cure." Selecting the left eye, Prof. G. raised the conjunctiva, opened it, drew forward the internal rectus and divided it; result of the operation, perfect parallelism of the two eyes, and, so far, no second operation required.

Case 3. Eda R., aet. twelve weeks. Talipes varus of right foot. "When should we operate? Just at the time when the patient is inclined to bear his weight on feet: they will be larger, and patient will bear it better." Prof. G. usually operates when patient is six to nine months old.

Case 4. Catherine M., aet. 6. "On moving right femur we move the whole pelvis, the spinal column seeming to be the centre of motion;" (patient walked before the class, showing the characteristic swing of the whole pelvis along with the limb); "case

therefore, one of hip joint disease." History: cause, a fall; been treated for pain in the knee. Prof. G., tracing the insidious onset of the disease under consideration, reminded the class of the anatomical reason why pain is first referred to the knee, when it should only furnish an index to point out the real difficulty. Enumerating the means of diagnosis, he referred to the involuntary fixing of thigh and its characteristic effect upon the gait in first stage; to the lengthening and eversion in the second; and the inversion and shortening, simulating dislocation, in the third; together, in the latter stage, with usual suppuration and abscess.

Treatment: (pain is a prominent symptom, there is no refreshing sleep.) In first stage, simply fix the joint, using dextrine or starch bandage; give *rest*, the first demand of nature in inflammation; use constitutional treatment in accordance with the state of the child; cod oil, animal food, fresh air, etc. In second stage, straighten leg, using chloroform if necessary; break up adhesions, extend leg with pulley, etc., and if you have a good airy room, this treatment may be the best you can give; if you prefer to send patient into open air, put on proper splints, but splints, generally, become painful. Many cases do badly under any treatment; then resect; it promises more than anything else. Our case here requires dextrine splint; it will be applied, and patient put in charge of dispensary staff.

Case 5. Referred to Medical Department.

Case 6. P. K., aet. 35. Abscess at side of rectum; probe does not get into rectum, but the abscess probably entered into it. (Prof. G. described here fistulae, complete and incomplete); passing bistoury on director to the point reached by probe, he cut out, not into the rectum, because fistula could not yet be traced into it, but at next examination the farthest point of this exploration will be taken as a new departure and fistula traced to its termination; will then, probably, cut into rectum, and plug.

Case 7. Eddie C., aet. 7; traumatic swelling, anterior femoral region; a good opportunity for class to make a diagnosis very frequently called for in practice. Is there constipation? No. Then it is not hernia; it feels and looks like abscess. Prof. G. opens it, giving exit to a large quantity of pus. "If abscess walls are thick, look out for femoral artery; if you fear aneurism, use exploring needle."

Case 8. Mary H., aet. 17; hare-lip. Imperfect operation at age of three months; "another instance where operation might have been postponed for some months;" lower parts of lip still joined, but central portion forming a large unsightly hiatus; left ala of nose drawn away on the cheek. "If, in operating for hare-lip we make straight incisions, there will be left a receding angle at free end of cicatrix, but if we make properly curved incisions, we can leave redundant tissue there." Prof. G. operated; cutting out cicatrized edges, but not dividing the slight point of union below; introduced silk sutures, bringing parts together, ala of nose previously spread out on cheek, coming up to its place handsomely.

Case 9. John M., aet. 6; enlarged humerus, and fistula; had pieces of necrosed bone removed at former clinic; has necrosed bone now, which will be removed at future operation.

[Reporter did not attend subsequent clinic, not anticipating that these scraps might be useful.]

ARTICLE IV.—*Transfusion of Blood.* By CARL PROEGLER, M.D.,
late Surgeon German Army, Aurora, Illinois.

I have the pleasure to lay before the medical fraternity a few interesting cases of transfusion of blood, and I do it very reluctantly, knowing that our text books contain but very little. There are only twenty cases on record, as far as I know. The late Franco-German war has developed a good many striking features interesting for the surgeon only, not having been noticed during the late American war.

Tremendous battles such as have not been fought since the beginning of known history, and masses hurled together for certain destruction as not even the war era of the first Napoleon can point out, left some physical phenomena, as I would call them. Take only the deaths of the German army, 119,000 men, 3,000 officers, among them quite a good many surgeons, and any one may see that the fighting was done with desperation on either side.

The troops who came out alive from the bloody battles of

Rezanoible, Mary aux Chenes, Mars la Tour, and Gravelotte, experienced strange feelings, dizziness, deafness, nervous irritability, etc. But more so the French troops after routing the Commune.

After being discharged from the medical service of the German army, I wanted to see the other side of the picture, and only by strict adherence to the French and English language, I escaped detection as a German. The scenes after the fall of Paris beggar description—it was an embodied hell on earth. No discipline, no order, nothing. I saw wounded men dying by the dozen for want of attendance. Doctor Lefevre and several Russian gentlemen had a kind of provisory hospital near the Passage Saumon in the neighborhood of the Rue Richelieu, and here it was where I had occasion to try transfusion of blood. Most of the amputated died with secondary hemorrhage, probably produced by the nervous shock and excitement. I can relate only surgical cases, and having had four successful cases, I may without presumption point out, that to my own mind, in all cases where there is a great loss of blood, either produced by wounds, or rectal, pulmonary and uterine bleeding, transfusion ought to be resorted to as the dernier resort.

As transfusion of blood has been but very little practiced, I might be excused for pointing out the indications for transfusion in surgical cases.

1. Where amputation has been delayed on some account, with but little chance for the patient, but where the latter insists upon an operation.

2. Re-amputation or resection on account of pyemia or extreme hemorrhage, either on account of dangerous after-bleeding, general debility, or a hemorrhagic diathesis.

3. Extreme prostration on account of shock, and where life seems to be in imminent danger.

In cases of amputation, provided the patient was, up to the time of operation, a healthy man, his own blood might be taken, and instead of opening a vein in the arm, any of the branches of the saphena can be taken. The blood may be thrown in, in the already cut veins, care being taken to take a vein which has not too large a sheath. Future experience must point out more fully the correctness or otherwise of this view.

If you decide to transfuse blood into the arm, the median basilic is the best. The patient ought to be placed in a recumbent position, so that the blood may flow towards the heart, and then the operator dissects down to the vein, carefully dissecting loose the cellular tissue for about half an inch, and a double thread passed under it, so that the vein may be drawn out, when the operation commences. You may either cut a V-shaped piece out of the vein or cut the vein half through.

The blood when taken from the arm of a person ought to fall into a basin previously warmed with a temperature of about 100°, stirring it slowly with some glass reeds, care being taken not to create any air bubbles. Some authorities use phosphate of soda to prevent coagulation, but I have not used it; the even temperature is the main thing in my mind. After stirring, it ought to be strained through a perfectly clean muslin cloth. The instrument used is a Pravay syringe, made of glass, and holding three ounces, with an india rubber tube and a fine steel or silver nozzle cut like a pen. The amount to be injected varies according to circumstance but it never ought to exceed 16 ounces.

The vein is then put upon a probe, the nozzle carefully held and inserted and closely held by an assistant, care being taken that no air enters. It requires a little skill to do it, but will soon be learned on dogs, etc. I practiced first on cadavers, having an abundance of them.

Case 1. Leautie, French soldier, wounded in the streets of Paris; gunshot wound of the thigh; conservative surgery tried, but on account of deep-seated ulceration, about a week after admission amputation was performed. Operator, Dr. Le Ballier. Patient was of delicate health, but had never been sick previous to admission; nervous sanguineous temperament; pulse before operation, 95; countenance pale, and coming very slowly under the influence of chloroform. On account of his pulse, had to leave off anesthesia. Operation ended without any material changes, but patient lost a good deal of blood in spite of first class assistance in the person of Dr. Boucher, who compressed the femoralis. Pulse feeble, respiration hurried, all the symptoms of approaching collapse, and transfusion was speedily resorted to; used patient's own blood, was stirred with a glass reed, preventing as much as possible the formation of bubbles, and with the proper temperature, strained

through a muslin cloth. I injected about four ounces; and let me say here, that where the blood is injected in the leg, the vein ought always, in cases of amputation, where there is a round and short surface, to be dissected carefully upwards, so that the nozzle of the syringe may be safely inserted, placing the leg high up and the patient low down.

The effect of the transfusion was, in this case, readily seen, and the symptoms became decidedly better. I used in this case altogether, eight ounces. The patient was kept in a recumbent position for a little while, carefully watching the pulse and the heart.

Patient was not removed to his bed until four hours after the operation, feeding him in the meantime with beef tea and wine, and producing artificial heat by warm bottles, etc. Patient made a good recovery. This case would not have stood the fearful loss of blood if transfusion of blood had not taken place.

Case 2. Morrel, French soldier, wounded before Paris by a ball penetrating the left lung between the third and fourth ribs. I have never seen a more hopeless case from the beginning; patient would lose blood every day, and discharged about an ounce of pus during the day from both sides. With the best of treatment, he grew worse. When I saw him he had a frightful attack of hemorrhage from the lungs, the third he had in the course of two days. Pulse 120, breathing hurried, clammy sweat, extremities cold, in fact, all the signs of speedy dissolution.

Ordered internally—sesquichl. of iron and brandy, but without any perceptible change. In consultation with Dr. Bagirsky, Le Vallier, etc., it was concluded to try infusion of blood; the blood was taken from a robust Frenchman. The median basilic was dissected and transfusion began; used with him nine ounces. The appearance after the introduction of the first three ounces was very marked; pulse perceptible and fuller; systolic murmur was heard, etc.

I placed him under the guardianship of a medical student, who watched him carefully for the next two weeks. The patient was doing finely when, through the negligence of the head steward, his room was cleaned, by which he caught cold, inducing double pneumonia, of which he died. It is evident that in this case life was prolonged.

Case 4. Farganier, French soldier, wounded at the tibia, showed signs of pyemia, and amputation was performed. Patient was of a

cachectic tint; pulse, 90; heart's action weak, besides having a hunterian chancre. All of the surgeons were of the opinion that there was but little chance for his recovery. Used the blood of a healthy French peasant, a brother of the patient. Injected, after operation was over, and he gradually began to sink, six ounces in the vein of the leg. With the help of stimulants and proper after-treatment made a recovery.

Our profession has for its great aim the prolongation of life, and if I have contributed something to make death less fearful, or even prolonged life for a few seconds, I have been richly rewarded. For my colleagues it is now to consider these points, and I hope that future experience will reveal perhaps a better method than I could devise.

Dr. W. Betz, of Heilbronn, Germany, tried transfusion of blood successfully in a woman laboring of hemorrhages from the stomach and bowels. In spite of all care, he relates, that two very minute bubbles of air were forced into the veins; the entrance of air was instantly followed by profound collapse, but by the use of cold water and other restoratives the patient was soon revived. The woman ultimately recovered.

As already said, transfusion must not be put off too long, until death is, as it were, already sitting upon the lips. There have been used from one to two pounds, but such quantities produce so much systemic disturbance that it is better not to use more than 16; in the cases related I have not used over eight. I had not to resort in the same subject to transfusion again. The fatal cases died soon after. Any functional disturbances, as headache, etc., following transfusion, should be quieted with hydrate of chloral, morphia, etc.

ARTICLE V. — *Death: Legal and Actual.* By I. N. DANFORTH, M.D., Chicago.

On the 26th of August, 1870, one J. H. Skaggs was hanged at Bloomfield, Stoddard Co., Mo. This cheerful scene "was public, and witnessed by more than twenty-five hundred persons;" every one of whom, we may add, with the exception of those necessarily present, ought to be thoroughly and everlastingly ashamed of themselves.

"At twelve minutes after one o'clock, the platform dropped, and the convict fell a distance of more than six feet. The noose was adjusted to the usual place, but at the drop the rope slipped behind the mastoid process. In three minutes all struggling ceased. At the end of four minutes I found, (says Dr. Robert J. Jackson, of Bloomfield, whose letter, published in the *Journal of the Gynæcological Society of Boston*, for June, 1871, I am quoting), a distinct fremitus passing over the region of the radial artery, which entirely ceased at the expiration of six and one-half minutes; at the end of four minutes more all signs of life had disappeared and the body was blue; I then pronounced him dead, in which opinion Dr. J. F. McDonald coincided. The body was allowed to hang four minutes longer; in all, fourteen and one-half minutes since the fall. I then suggested the removal, which was at once done."

The body was taken a distance of fifty yards to a room in the court house, and Drs. Jackson and McDonald "proceeded to the experiment of resuscitation." Artificial respiration failing to produce the desired effect, the poles of a galvanic battery were placed over the pneumogastric nerves, and strong currents were "passed into the body at intervals of four seconds; this was soon followed by indications of respiration." At this point, the sheriff interfered, and "ten or fifteen minutes were lost." The experiment was then resumed; but another interruption followed. "At eighteen minutes past two o'clock—writes Dr. Jackson—we again went to work; and in a few minutes the action of the heart and radial pulse were perceptible."

At this juncture the sheriff—who was evidently no baby in the matter of strategy—executed a brilliant flank movement by carrying off the wires belonging to the battery, and this interrupted the

business for the space of thirty-eight minutes. "After recovering the wires and working a short time, Skaggs swallowed a small quantity of brandy and water." Cayenne pepper and whisky were employed to excite the circulation in the extremities; bleeding was resorted to—and, as a result of all this, the pupil contracted, "the pulse assumed a strong and steady action, and the breathing became easier and more regular. He now used the ocular muscles, his eyes following persons around the room. This was more marked at nine o'clock; at which time, by the interference of a mountebank, the opposition of the populace became so violent that we were obliged to relinquish all further experiment. Skaggs lived until four o'clock the next morning." (loc. cit.)

It is pleasant to be assured that at least a portion of the twenty-five hundred spectators maintained a lively interest in this performance up to its final termination: "the room was crowded almost to suffocation during the whole experiment."

In spite of the "wire pulling" of the sheriff, and of the "interference" of the "mountebank," and of the "opposition of the populace," Scaggs would undoubtedly have recovered, had the "proper remedies" been administered. Mr. C. S. Halsey, of Chicago, to whom a report of the case was sent, says that "arnica or perhaps belladonna should have been given at first, and when the pupil contracted, opium seemed indicated." Those physicians, therefore, who propose in future to rob the scaffold of its terrors will do well to take notice that arnica, belladonna and opium are "homœopathic" to hanging, and govern themselves accordingly. I may be pardoned for remarking, by the way, that the "provings" which demonstrated this fact, must form an interesting chapter in the history of homœopathic therapeutics.

Passing by the excessive barbarity of this whole performance on the part of the physicians concerned therein; passing by the weak and shuffling sheriff who permitted this odious business, which it was clearly his duty to arrest, *vi et armis*, if need be; passing by the gaping crowd of twenty-five hundred which stood idly by, neither of which particularly concern the readers of a medical journal, let us glance at a few points which *do* interest us as physicians, from a humanitarian, medical or medico-legal point of view.

From a humanitarian stand-point, this affair must be condemned

as a most ingenious refinement of cruelty. If it shall ever occur to me to be half-hung by some blundering executioner, in the presence of twenty-five hundred people, I pray that Drs. Jackson and McDonald may not be there. I can conceive of no more grievous or terrible burden; I can imagine no more bitter or horrible torture, than to be again invested with thought and memory after having been pronounced guilty by a jury, sentenced by a judge, and ignominiously hung by the neck, in answer to the law's demand. If the attempt be made to defend this resuscitation of Skaggs upon the ground of mercy, the obvious reply must be that it was mercy so disguised by cruelty, that the merciful element is crowded out of sight and hearing. Whatever humanity demands of the physician, it does *not* require that he shall step between the law and the criminal upon whom that law inflicts its penalty. The same principle carried out, would justify the physician in throwing open the prison doors, and, in fact, in practically bidding defiance to all attempts to enforce criminal law. Nor does science either require or sanction any such experiments upon human beings. If any such experiments are needed at all, they can just as easily and just as satisfactorily be performed upon the lower animals. In this case science may, with peculiar appropriateness, protest against being made the apologist for barbarism.

From a medical, or, more correctly, from a physiological standpoint, this case is one of peculiar as well as painful interest. Drs. Jackson and McDonald, being present as medical experts, pronounced Skaggs dead, and then immediately proceeded to demonstrate that he was *not* dead. As a matter of fact, profound asphyxia was mistaken for actual death, and it is highly probable that many criminals have been removed from the gallows under the sanction of medical authority, in like condition. Nor could this be esteemed a proper matter for criticism, even if one were so inclined, as I certainly am not. Two points, however, are of practical importance in this connection. The first is, that in many cases of death by hanging, the neck is not dislocated, and therefore death must occur by the comparatively slow and terribly painful process of strangulation. Criminals in America, who suffer the extreme penalty of the law, are the victims of much professional botch-work. If the case of Skaggs is any criterion, a criminal ought to be thankful who gets himself fairly and honestly executed even by strangulation.

The skill of Jack Ketch, who "worked off" the inmates of Newgate with such dexterity, perished with him, and those who propose to indulge in the luxury of murdering their fellow men, ought to take this fact into consideration beforehand.

In Skaggs' case, writes Dr. Jackson, "the noose was adjusted to the usual place"—wherever that may be—"but at the drop the rope slipped behind the mastoid process." Yet this case is neither the first nor the worst of its kind. In England the attempt was once made to save a criminal by making an incision into the trachea, below the rope, and introducing a tube to permit the continuance of respiration. "After being taken down, blood was drawn from the jugular vein, the malefactor opened his eyes and sighed, but did not recover." (Dean's Medical Jurisprudence, p. 440.)

Mr. Dean relates two other cases, which I quote as follows: one of a "woman in the reign of Henry VI, who remained suspended one whole night, and was still alive, owing, as it was said, to her larynx having been ossified;" and another "of a woman convicted in Edinburgh in 1728, who after having the sentence of the law executed upon her, or attempted so to be, recovered, and afterward lived twenty-five years." (*loc. cit.*)

The next point of practical interest to physicians who are called upon to attend executions for the purpose of deciding as to the occurrence of death, may here be brought forward; namely, the absence of signs of life does not necessarily prove that death has taken place. The heart's action may have ceased, the pulse may be imperceptible, and yet the victim may not have passed beyond the possibility of resuscitation. In the case of Skaggs "all signs of life had disappeared, and the body was blue;" and yet, under more favorable circumstances, the attempt at resuscitation would have been successful. It seems to me not only a very possible but a very probable thing that, in a vigorous healthy person, who suffers a sudden and violent death, cell-life, or, in older phraseology, "molecular life," continues for some time after all appreciable signs of life have completely ceased. As Carpenter so aptly states it—"somatic death" and "molecular death" do not occur together. (*Human Physiology*, p. 865.) Each cell possesses an independent life of its own; each cell is a sort of vital magazine, and is therefore capable of living, even though the heart has ceased to act, so long as it can procure the means of growth, and this depends

upon fresh supplies of blood sent to the various cells by the heart. Those phenomena which are suddenly interrupted by execution, such as locomotion, circulation and respiration, are not of themselves *life*, but rather the results of life. The cessation of either or all of them, therefore, does not necessarily or immediately imply death. To state the actual fact in the plainest way, the mere act of hanging, however skillfully performed, does not *immediately* lessen the aggregate of vital force in the individual cells of any organ in the body; and as criminals are commonly executed, actual death only takes place after vitality has been literally choked out of the body. Hence, while it is indeed a terrible fact, it is by no means an inexplicable fact, that it is sometimes possible to resuscitate criminals, after all the ordinary phenomena of life are wholly extinct. A very important practical question presents itself here, namely, how can the occurrence of death be determined with absolute certainty? The ordinary negative signs, as we have seen in the case under consideration, and as experience under similar as well as dissimilar circumstances has often demonstrated before, are not always reliable. Moreover, the dictates of humanity as well as decency—especially at public executions—demand that the malefactor be removed from the scene of his disgrace as soon as possible. On the one hand, the humane physician would shrink from demanding that an execution be prolonged after the extinction of life had become reasonably certain, as indicated by the apparently total absence of signs of life. On the other hand, he has no business there, unless he proposes to perform his duty according to the full and exact intent of the law; and *this* means *actual* not *probable* death. From the very nature of the case, it follows that there *can* be no positive symptoms or signs, which shall clearly and certainly indicate when profound asphyxia (apparent death) has been replaced by actual death. The mere absence of signs cannot properly be called signs;—and this is a question to be decided by negatives alone. No test, which infallibly proves the absence of life, has, to my knowledge, been discovered. The medical expert is therefore reduced to the necessity—disagreeable and painful though it be—of insisting that the criminal remain suspended until there shall be no possibility of resuscitation. In doubtful cases, it seems to me that the presence or absence of muscular contractility, as determined by the electric test properly and skillfully applied,

would aid in determining the question of apparent or real death—especially if the subject were previously vigorous and healthy. One point more deserves mention; the physician who is called to witness an execution, with the understanding that he shall be allowed to experiment upon the criminal subsequently, can scarcely be considered competent to perform his duties impartially. He attempts at once to execute and to thwart the law. When the sheriff promises the physician the opportunity for experimentation he offers a direct premium for the poorest possible services, and, more than that, he adds to an odious duty, a needless and inexcusable cruelty.

Considered in its medico-legal relations, the case of Skaggs is one of great as well as novel interest. According to Dr. Horatio R. Storer, of Boston—an authority of undoubted excellence in medical jurisprudence—if an executed criminal be formally pronounced dead and surrendered as such by the sheriff, if he be afterwards reanimated, he is entitled to his life, having technically fulfilled the requirements of the law. This may possibly stand the test of law—or rather of legal quibbling, unjustly dignified by the name of law—but it is very frivolous common sense. It amounts to saying that a man may be *legally* dead and *actually* alive. Under other, but far different circumstances, this sometimes is the case. If a man be sentenced to imprisonment for life, the law no longer recognizes him. He no longer possesses any legal rights, and therefore no longer needs the protection of law; hence his life *legally* ceases and determines with his incarceration. But the case of a resuscitated criminal is a far different one. If he regains his life, he also regains his liberty, and with it some of the powers which pertain to life and liberty. The law may indeed refuse him the highest privileges of citizenship, but the commission of fresh crimes will *compel* the law to recognize him. The commission of crime means the transgression of law; the transgression of law means punishment *by* law and according *to* law, and this secures to the criminal one of the highest privileges which the law can confer—namely, trial by jury; and I apprehend it would make little difference whether the accused had been previously asphyxiated or not, or if so, whether the asphyxia was produced by the hangman's noose, or by carbonic acid gas, or by tumbling into Chicago river. In point of inexorable fact, therefore, whatever

the theory may be, no man can be legally dead, so long as he possesses the power to harm his fellow men. The criminal imprisoned for life, is legally dead *provided his sentence be literally executed*; but let him regain his liberty, either by escape or through the intervention of the pardoning power, and he instantly becomes legally alive—that is, amenable to law. When he regains the privileges of liberty he also reassumes the responsibilities of liberty.

If the position of Dr. Carroll of the *New York Medical Gazette*—that, when a criminal supposed to be dead shall “prove not to be dead,” it will be the duty of the sheriff to “hang him over again,”—be not a correct position, it certainly deserves to be. If the law, which clearly demands *death*, can legally accept asphyxia in place thereof, then language becomes meaningless and powerless. If law can accept an *intention*—honest though it be—for an *actuality*; if it can accept the *intention* to fulfill its requirements for the *actual* fulfillment thereof, in one case, it can in all cases. Let this doctrine be once established, and we shall have a standing premium for all manner of shuffling trickery, to evade the literal demands of law. Let the doctrine be once established that the laws against crime may be executed according to the whimsical interpretations of men, rather than their strict and literal meaning, and society will be turned upside down. The law must say precisely what it means, and mean precisely what it says, and it must be executed by the actual and literal and perfect, not *intended*, performance of its requirements, or, instead of a government based upon law, we shall have anarchy and confusion. Again, if the position of Dr. Storer can be successfully defended, how can that sheriff justify himself who kills his victim outright hereafter? or how can that physician justify himself who witnesses and sanctions the absolute destruction of life on the gallows? In other words, if a good sound choking satisfies the law's demand, when accompanied by the usual formalities incident to hanging, do not the medical expert and the sheriff needlessly and wantonly destroy life when they do more than administer the choking? and if life be needlessly and wantonly destroyed, is it not likewise criminally destroyed? There is no escape from this conclusion, unless logic and law have parted company forever. Criminals cannot be legally hung and legally half-hung, in answer to the demands of precisely the same

law, for the commission of precisely the same crime, nor can any useless formalities, or idle mummeries, performed by sheriff or physicians, bring falsehood out of fact, or fact out of falsehood.

But, admitting for a moment the logic upon which Dr. Storer's interpretation of the law is founded, a question of considerable practical interest—at least to the resuscitated criminal—presents itself; namely, the question of his own identity. If, by reason of having been asphyxiated under sanction of law, he is thenceforth to be regarded as one dead, he must of course lose his own personality as a member of society. If he loses his own identity, whose identity does he gain? Is he *himself* or somebody else? He must certainly buy at least food and raiment, and he must certainly sell the products either of his head or his hands, and these are transactions amazingly like those of persons not only alive but legally alive. By improving slightly upon the fiction of the law in both directions, however, we can very comfortably escape from our dilemma without in the least damaging its value or truthfulness—or falsity either, for the matter of that. If we substitute death for asphyxia, (following the example of the physicians who watched the demise (!) of Skaggs,) and resurrection for resuscitation, we shall thus find plain sailing, for a resurrected person can resume his former identity without permission of law—at least so far as experience has thrown any light upon the subject. Exactly how resurrections under such circumstances should be conducted, it is difficult to say, but probably "galvanism" and "bleeding," especially when aided by "cayenne pepper and whisky," will prove as effectual as anything. Precisely how resurrected criminals may be expected to conduct themselves we are still slightly in the dark, but it is more than likely that the most of them would naturally commence life anew by "swallowing a small quantity of brandy and water."

The case which I have considered stands not alone. The city of Philadelphia, with all its culture and civilization, has permitted a similar performance to be enacted, if my memory serves me correctly, in the amphitheater of the Jefferson Medical College. It would seem, therefore, that the luxury of experimenting upon the bodies of executed or half-executed criminals, is gradually coming to be regarded as a kind of perquisite, belonging to the physicians called upon to assist in executions. Such experiments are wrong

in principle, unjustifiable and barbarous in practice, and without adequate benefit to science or humanity. On these grounds, then, they ought to be stopped at once and forever. Whatever may or may not be done to the mutilated body of the malefactor in a Christian land, one thing is certain: the medical profession ought to repudiate and sternly condemn a procedure so odious and disgusting, as the one which has given rise to this present article, and one which, if repeated, is so certain to bring deserved censure and odium, not alone upon those who are immediately concerned therein, but, to a greater or less extent, upon the profession as a whole.

Correspondence.

Modern Tendency of Homœopathy.

MY DEAR PROFESSOR—Some one recently asked for light on homœopathy; your October JOURNAL doubtless contained it, but as it has been swallowed up in the great fire, I hereby propose to triturate homœopathy a little and to essay a picture of that attenuated fraud as it stands at present.

Homœopaths who wish to succeed now, find it necessary to be graduates of regular colleges, and further, they find it necessary to practice regular medicine, at least to some extent; complying with these requirements, they use the name homœopathy as an *open sesame* to the purses of the credulous, and often accomplish fortune.

There are those who still believe religiously in the doctrines of Hahnemann; yes, who believe in the infallible efficacy of potencies diluted to an extent of which Hahnemann never dreamed; they form the bulk of the "profession;" their gushing faith fills homœopathic journals, their enthusiastic conversation revives our confidence in the existence still of innocence and simplicity, but they don't *succeed*; the world has gotten beyond that point of credulity, it still seeks the names of these false gods but not their faith.

I have sought for good in homœopathy, have heard lectures upon it, read Hahnemann and other authorities, and, lastly, have interviewed the best homœopathist I could find, telling him that I wanted to find out if there were anything good in it, and if there were, to adopt it. I asked for a case of disease and homœopathic treatment; he gave intermittent, said that rhus, cinchona, etc., would produce similar symptoms in health.

Q. We use cinchona; what dose do you use it in?

A. "One drop of tincture in teaspoonful of water every hour."

Q. Does it break the chill?

A. "Yes, in a few days."

Q. Not at once?

A. "Sometimes it does at once, but nearly always in a few days."

Q. Ague is rare and mild here, we never fail to stop it at once, not letting patient have another chill.

A. "Rarity and mildness of ague admitted."

Q. You say you stop chills in a few days; we stop them at once with quinia; here we seem to have an advantage over you. How does an infinitesimal dose of cinchona act?

A. "I don't know; how does a large dose act?"

(*Argumentum ad hominem.*)

Ans. continued: "They theorize on the subject, but I think it is wrong to do so; they say dilution frees force, that division and trituration develop dynamics."

Q. This seems to be sticking to the doctrines of Hahnemann. Are his maxims still regarded as orthodox in your school?

A. "Yes, they are still the law, and dilutions are now carried much higher than they were by Hahnemann."

Q. Do you believe in these dilutions?

A. "I can scarcely believe in them."

"It is contended by some that the original drug contains a spiritual agent, which is the truly curative power of the drug, and is developed or set free by the triturating and shaking processes; others contend that the development of the curative powers of a drug is a purely mechanical thing, and that the mechanical breaking up of the constituent particles of the drug constitutes that development. By the former these successive developments of the

original substance are called *dynamizations* or *potentizations*; by the latter, *attenuations*."—*Jahr & Gruner's Homœopathic Pharmacopœia*.

(The above interview was with one of the latter class—an intelligent gentleman and excellent surgeon.)

Interview with one of the former, the more numerous class:

Dynamizationist. "We use many drugs that you do; instance, rhubarb in dysentery."

Q. Why do you use it?

A. "It produces symptoms of dysentery in health."

Philosophic reason; *celi calorum*! Suppose that a man is suffering extensive perturbations in the dynamics that vibrate around the sigmoid flexure of the colon, having congestion there, caused by the presence of a load of green apples, shall we attempt a neutralizing perturbation of those dynamics with the microscopic fraction of a grain of rhubarb? or shall we remove those apples, correct the changed structure of the inflamed part, and cause pain to vanish with the sulphureted hydrogen, like the baseless fabric of a vision leaving not a rack behind?

Our homœopathic friends believe that force obtains more freedom and becomes therefore more potent as it is attenuated; for instance, a grain of zinc is an aggregation of material atoms, around each of which, atoms of force exist; they believe that if this grain of zinc could be dissolved in 100 drops of water that there would be less force in the solution than if one drop were taken from it and mixed with another 100 drops of water, and that this second "potency" would not be so potent as the third, and so on; this belief is indicated in almost every case recorded by homœopathists. If it were true, a current of force sufficient to work the Atlantic cable ought to be increased by attenuating the zinc in its battery, but methinks electricians would be somewhat astonished if told that attenuating their zinc would develop more dynamics. The Atlantic cable has been worked by a battery composed of a percussion cap, but, sad to say, the current was not any stronger than when 30 cups of *Grove* were used, but on the contrary, was weak exactly in proportion to the attenuation of the zinc, and I affirm that if zinc ∞ were used, the amount of force given off would not be appreciated by a dynamometer if its delicacy were multiplied

by all the figures in mathematics. Here is a fair test; if homœopaths can develop dynamics by attenuation, let them develop it in the form of electricity, or heat, or light, or any other form that can be appreciated; and here let us ask them what form of force do their potencies develop in the body? Is it nerve force, or electricity, or what? Force is a unit; there are differences in degree (of motion) not in kind (of force); these degrees are convertible by changing structure;* please then, dear dynamizationists, convert the force which you say zinc ³⁰ produces in the body, into magnetism or *something*, and *increase* it as you attenuate your zinc, say to \circ^{∞} or \circ^{200} ; failing to do this, will you forever hold, etc.? or will you still talk of Jolly's experiment with water and saltpetre? (in which water decreased in volume on the addition of said salt.) Grauvogl, in his text book of homœopathy, puts it in this light: If it requires 940 atmospheres to compress water, a solution of saltpetre is equal in force to 940 atmospheres, if it does the same work. This is as good as saying, that if it requires the blow of a sledge hammer to kill a man, a grain of arsenic is as strong as a horse if it kills a patient. "Like produces like," but how about the *like circumstances*, how about the essential relation? Is there any relation between the manner in which saltpetre acts and the action of 940 atmospheres in a pump?

But our friends decry chemistry, it is too gross for them, the human laboratory is the perfect thing for demonstrating the dynamics of the infinitesimal; casting aside all calculations based upon chemistry or mathematics, they appeal to experiment alone. Grauvogl says: "When I began the study of homœopathy, the rock of the attenuation question on which so many of our adversaries' heads have suffered shipwreck, was to me an object never worthy of consideration; * * * *. The laws touching the proportion between matter and vehicle interested me the less because I had first of all to discover by experiment and observation the laws of relation between these homœopathic attenuations and my own organism, hence I proved on myself, etc. * * * *; these experiments and observations had driven from me forever

* Under the laws of correlation of force; instance, battery producing heat or electricity by varying structure of zinc, and producing light by another slight change.

all doubts about the efficacy of homœopathic attenuations, I gave myself no further trouble about the well known mathematical description of these attenuations which were sufficient to frighten so many away."

Here is the final appeal, viz.: to experience, or should we not say to imagination, morbid attention, and sleeplessness?

Having thus seen our homœopathic friends place themselves in outer darkness, hiding their little arrangements from the light of chemistry as well as physiology, it only remains for us to investigate their last resort, experience, as recorded in their journals. And here I had intended to transcribe 17 or 18 cases from infallible homœopathic journals, taking them in rotation just as presented, to show that their treatment bore about as much relation to recovery as cunderango to the siege of Paris; but those transcriptions have now evaporated to the home of the fire fiend, so the brethren must read for themselves; and O, dear brethren, are our own skirts clear here? and will not some coming homœopath elevate *my* Mansard and furnish *me* with a gutta percha aural apparatus on the strength of "heroic opiates," "sedative purges," and other idolatries worshipped by our own routinists?

I have not thought it necessary to *satirize* homœopathy; that has been done so thoroughly that I rather feared plagiarism therein. I might have mentioned that salt hath 687 symptoms, that I find 100 symptoms given as a few of those of the larynx, with 500 arrangements of "remedies" *indicated* therefor; might have quoted "CIMEX LECTULARIUS (bedbug). We crush the insect while alive, and macerate it in alcohol."—*Jahr & Gruner's Hom. Pharmacopœia*; but mute horror prevents further progress in this direction. Homœopathy hath a dictionary of symptoms, it is an immense thing, they refer to it in every case; no exercise for reason or judgment, only for memory; no account is made of structure as influencing disease, only "perturbation of dynamics."

I have thus endeavored to photograph the prominent points of modern homœopathy, touching the attenuation question, for which I have suggested a test that I think will be appreciated by students of force and its manifestations, referring to experience, the final resort of homœopathists, upon which their journals are living satires, and indicating the tendency of the present time, which is for intelligent homœopathists to discard everything homœopathic but the name, the only good thing I can find in it, and the only

advantage they have over us. I apprehend that homœopathy thus shown is not to be cured by persecution, nor yet to be killed by hugging it to death as some have recommended, but that it will perish of *inanition* as soon as we can apply a cure for the chronic stupidity of our own dogmatic empirics who are of drugs druggy, which cure is pathology, and I do not know, my dear professor, how we are to hasten this consummation unless you write a book upon the principles of medicine.

When all our physicians under the enlightened teaching of this age shall discard the mysterious and supernatural, and shall practice upon certain knowledge of "what is the matter," ceasing to give drugs because they are said to be "good for it," but using the active agents of the *Materia Medica* to produce definite results upon organic structure, or as exceptions, when overwhelming evidence attests their efficacy; then, I think, the success of physiological medicine will leave no room in public favor for such speculative follies as homœopathy.

Respectfully,

J.

CHICAGO, Oct. 20, 1871.

DEAR PROFESSOR—The zeal of your aged correspondent in behalf of homœopathy is quite amusing; and as he seems to desire information as to why the regular practitioners (of the old school of Hippocrates and Sydenham, of common sense as well as science), are opposed to homœopathy, I will try and inform him. In the *Medical and Surgical Reporter* for April 1st, 1871, our antiquated friend will find the legal definition of a quack, by the Supreme Court of New York, to be, "Whoever offers to practice homœopathy or allopathy as his patients may wish, is practically a quack in his profession."

We commend this to the consideration of our aged friend and to those numerous doctors who "have studied both schools and find good in both," as they delight in informing their patients—*Ex pede Herculem.*

We will not attempt to reply to his arguments seriatim, but will try and give a general review of the subject in a familiar and colloquial style.

Firstly, of the system of homœopathy what most staggers our judgment is the infinitesimal smallness of the doses. And as to these minute doses, for the physical efficacy of which they vouch so manfully, I have a few things to object. They say that it is a well ascertained fact that the ten-thousandth part of a grain of antimony will produce an appreciable effect, as that a scruple will; or as certain as any fact in the range of inductive science. I doubt it; I can and must judge, principally, from my own consciousness, though not from that alone. I take your prescribed globule, and cannot find that it produces the slightest effect upon me. I am willing to take any of your decillionths of grains from one to fifty. I have done so, and I do not find the effects assigned follow from these minute elements, and this experience is universal. They may say that the experience of others is different; that they find the minute doses palpably "potential;" that the effects of even a decillionth of some substances have been appreciable. No such averments can annul the *negative* instances I have mentioned; for your inference on the positive side, may easily be the fallacy—"Non causa pro causa."

For example, the peristaltic action is often slightly increased by the mere imagining that medicine has been taken when it has not; many other processes are quickened by fancy; in many, again, all that is required is, instead of taking medicine, to use a little patience, and nature will perform her wonted task without the *globules*, and will doubtless perform it none the less *because* of the globules.

I have known a patient troubled with insomnia take his invaluable "minutissimum" of a soporific—his narcotic atom—and congratulate himself next morning that, after only two hours or so of restlessness he fell into a calm sleep—all owing, of course, to the viaticum of a globule!

I, on the other hand, equally troubled with sleeplessness, perform the same feat perpetually without any globule at all.

The simple solution is, that both parties are wearied out and at last go to sleep. Now, I can account for the effects in many such cases, without supposing your globule has had anything to do with them; but I cannot account for the *want* of effect in the negative instances; that is, where your globules to all consciousness produce none. They may reply that there are cases in which large doses fail of their effects. I grant it; there are no doubt cases in which the effect is intercepted by special causes; but we must go by

general *induction*, and five grains of opium, or two scruples of rhei, will effectually convince nine hundred and ninety-nine out of every thousand that they have taken something. The difference in the two cases is, that those who venture to say they are conscious of the effects of your decillionths are, so far as I know, very rare exceptions; while of those who take the larger doses, the rare exceptions are those who are not affected; that is the general rule, and the exceptions change places. Again, when the larger doses fail of their general effect they leave potent signs to consciousness that something has been taken; whereas I can take one or ten of your decillionths of a grain every hour for four and twenty hours together without any conscious effects whatever; and other people have similar obstinate experience.

Another doubt I feel as to your infinitesimal doses is this. How can you be sure that you have administered them—that they have got into the patient's stomach at all? If they have not got there, I admit they will produce no more effect than they usually do when they *have* got there. But I know not how to be sure that they have reached their destination. They may, like the globule which was arrested in the hollow tooth of Hahnemann's patient, (his solitary fatal case!) be waylaid by a million obstacles, each too much for the poor little atom.

Moreover, I cannot comprehend, on Hahnemann's theory, how we can remain in health a day, since we must be taking all day long, through our lungs and in our food (especially in these days of adulteration), your minute doses of the most deleterious substances. If they say, according to the usual assumption (and it is nothing more,) that they will only affect the person in disease, and not in health, then when he is out of health, positively ill, and under treatment, these potent though inappreciable agents must come into play, and I think must confound your therapeutics. If they say they all happily neutralize one another, I suppose your little globule will be but another element among them, and must, I think, get neutralized too: certainly you know as little what becomes of *it*, as of them.

At all events it is clear, that if such a chance medley of potent "infinitesimals" *can* thus happily neutralize one another, anything like a calculable administration of your solitary infinitesimal is out of the question.

One need not be surprised at the homœopathist, the contents of whose "medicine chest" his children got hold of, played with and jumbled together (all unknown to him), who went on practicing with the same success as before.

The oddest part of Hahnemann's absurd theory of "dynamization" is, that infinitesimal doses are not only potent, but potent in the ratio of their minuteness. According to this, the "second, third, fourth, etc., orders of infinitesimals" (as mathematicians would say), are progressively powerful; in proportion, it seems, as an atom becomes more attenuated—nearer to nothing, it becomes so much more efficacious! Just as it vanishes, I presume it must be—omnipotent!

Nothing can exceed this doctrine except it is Hegel's philosophical paradox: Nothing—Being. If their theory be true, I marvel at the usual language of the homœopathists, who speak of the higher dilutions in the order of feebleness, not of potency, and tell a patient not to venture in such a case on anything stronger than number thirty.

To be consistent, they ought rather to enlarge than to diminish their doses, where they wish to diminish the effect. Nay—surely a scruple of strychniæ ought to produce less effect than a grain—and a grain than a treccillionth of it.

But there is one statement in our venerable friend's communication which I cannot let pass without special comment. He says, "homœopathy has taught us two things, that sick people will recover with small amounts of medicine or none at all." Or, in other words, the public are indebted to the theory of minute doses for a modification in the practice of the "old school;" that it has abridged that wholesale exhibition of drugs which used to be the fashion, and which turned many a patient's stomach into a drug shop.

I am really pleased to believe that the rivalry between the medical factions has been attended with some such effects. At the same time do not flatter yourself that the revolution is greater than it is. Too much physic used to be given, that is certain, but do not suppose all was physic that was taken.

Rely on it—as many a medical man's confession, if ingenuous, would show us—that it was not left to the homœopathists to discover the virtues of a placebo, or in other words to find out the

art of doing nothing, under the pretence of doing something, just to amuse a patient; *vixerunt fortes ante Agamemona*; millions of innocent draughts of infusions of roses—and drams of syrup, quite as harmless as your globules, used to travel down the throats of patients simply because they *would* have something, and—*“Populus vult decipi et decipietur.”*

The only difference between the two classes of practitioners often is, that the one charges in the direct proportion of the innocent bulky nothing, and your friends charge in the inverse proportion of the innocent infinitesimal nothing. It was, I grant, rather an absurd practice, but it was used only as a *dernier ressort*, for many patients would not be cured unless they swallowed all this nothing, and what is more important to the doctor, would not pay unless they had as they thought “value received” in the shape of the material drugs, instead of reckoning their true debt to his visits and his skill. But be assured, my dear “Senex,” that the essence of this branch of the art—of doing nothing under imposing forms—was understood long before homœopathy was born, and will be understood as long as the credulity of patients shall demand that something shall be done, when the physician knows that nothing need be.

One of their negative arguments is, “If the globules do no good, they cannot, on *our* theory, do harm.” I fear there are many cases, and I have seen some, where your globules have done much harm by preventing anything good being done;—where symptoms that required prompt treatment, were dawdled with until the disease got strength and it was too late to do anything. I must also express my conviction that your doctors have an incomparable knack at making hypochondriacs; and I think very naturally. How should it be otherwise? Your system teaches a patient to believe that his life is ever at the mercy of infinitesimal elements and infinitesimal changes. Can he be other than hypersensitive about matters which never trouble other people’s sleep? Certainly, as far as I have observed, there are no people in the world who require the doctor, or take medicine so often as the devotees of homœopathy; hardly a day passes without the medicine chest. Well for them that it contains nothing!

Similarly, nobody is so sensitive about all kinds of innocent changes of air and diet. For my own part, it would be a torment

to live on the terms of some of the votaries of your infinitesimal doses, whom I have known.

However, I admit that such individuals are to be met with among the patients of the regular practitioners, though I think your system is especially adapted to befool a nervous temperament and stimulate a morbid fancy. I handsomely concede that there are classes of patients to whom your practice may be beneficial.

Firstly, I think it is of admirable use for those patients—and there are many—who have nothing the matter with them; for as they will take physic and require none, it is better they should take nothing though they think it something—at the same time it must be said, bread pills might on the other system do the work of nothing just as well. Secondly, for those who suffer from anomalous conditions of the nervous system, amenable in a measure to the fancy (as they often seem to arise from it), but whose symptoms baffle all rational treatment. It is often important that these patients be amused with the appearance of something being done—though here again the more bulky vehicles of *nothing* may do as well, for aught I can see, as the infinitesimals. Thirdly, for those who have, indeed, something the matter with them, but whose symptoms are so obscure that a wise physician is afraid to do anything lest he do mischief; while yet (as usual) the patient insists that something shall be done. Now here the globulets (if I may venture on the double diminutive) are admirable, I admit; though, again, the more corpulent pill of *micae panis* may be just as efficacious.

In short, as long as patients are so credulous in their reliance upon medicine as to insist that when the doctor knows that nothing need be done, or can be done, he shall yet do something, I see no help but in the exhibition of a placebo. If it be gravely argued that it is unworthy of a physician to administer a system of delusion, and that he had better leave his patient uncured than cheat him into health, it is a pleasant question of casuistry, which the doctor may, if he chooses, discuss in a clinical lecture and see what his patient says to it.

It is in vain, my learned doctor, that you reiterate that you have “seen the good effects” of your darling globules—that you have

seen your nieces, nephews"—*ad infinitum*, recovered under their use.

I have no difficulty in believing any facts merely on account of their mystery, and if on a fair induction more patients were discovered to be cured by your system than any other, I should believe in it, were it (if that be possible) ten times as mysterious. But a single case or two, or any man's private experience, does not by any means entitle him to speak *ex cathedra* on the subject, and is not worth a fig in the controversy either way; for the simple reason that every system of medicine might be proved equally efficacious on the same ground.

The Wit and Poet of our profession, Professor O. W. Holmes, in a lecture some time since, made use of the following language, which is quite apropos: "What is the honest truth about the medical art? That by far the largest number of diseases which physicians are called to treat will get well at any rate, even in spite of reasonably bad treatment. That of the other fraction a certain number will inevitably die, whatever is done. That there remains a small margin of cases where the life of the patient depends on the skill of the physician. That drugs now and then save life; that they often shorten disease and remove symptoms; but that they are second in importance to food, air, temperature, and other hygienic influences."

A very common fallacy is, that of "*non causa pro causa*," and especially in medicine, where a plurality of causes or *apparent* causes may perpetually mislead.

To the generality of men, it is enough if a certain antecedent has preceded a certain consequent, to satisfy them that there is the relation of cause and effect. Hence numberless fantastic remedies which different ages and nations have prescribed as useful merely because their employment has happened to be nearly coincident with the cure, though they have no more caused it than the cock's crowing causes the sun to rise.

The credulous association of a mere antecedent of the cure with the cause of it, (which is almost universal with patients,) is, it must be allowed, too much encouraged, by doctors of all kinds. Nothing is more common in reports of cases than to find an improvement attributed undoubtingly to the administration of

such a remedy, when the difficulty is really to establish the connection.

If the patient gets worse after the medicine, we never find this sequence insisted on; though, for anything we know, it might be just as reasonably. "Ah!" says a patient, "it was a good thing I called in the doctor; he cured me." If he is cured without any doctor at all, he thinks nothing of it.

When the patient recovers, the doctor gets rid of the disease in spite of nature; when the patient dies, nature gets rid of the patient in spite of the doctor! How do we know how often the statement ought to be reversed; how often nature saved the patient in spite of the doctor, and how often the doctor killed the patient in spite of nature.

You may infer that I am sceptical as to the use of medicine altogether; you will infer falsely then. I do believe that the great majority of ordinary attacks of disease would be cured without the aid of the physician, and that the great agent of cure is the *vis medicatrix*, with which our Creator has fenced the human organism, and by which it stoutly resists every incursion of disease.

But I believe there is a noble sphere for the physician, too; though I frankly confess that from the extreme difficulty of a really comprehensive induction—of establishing the true connection of antecedent and consequent, and from the infinitely variable, evanescent phenomena the science of the practice of medicine has to deal with—it will yet be many years before it will attain the certainty of an exact science.

Nevertheless, the wise physician has plenty to do—especially if he will not promise or attempt too much; if he will but be content to be the cautious *nature minister*, and stand by with the hope of aiding those processes within us, so many of which transcend all his art, and which, if he be rash, he may more easily hinder than help; or if, in a word, he takes that view of his position to which "old experience does attain," and which, in the language of Dr. Forbes, will lead him to acquiesce "in a mild tentative or *expectant* mode of practice," certain to appear wise "in old age, whatever may have been the vigorous or heroic doings of youth."

Surely we must allow that even if the physician only alleviates

pain and abridges processes which might otherwise be tedious, he is well worth all his fees. Nor less if he takes charge of us in *health*, and, studying its general physiological conditions, endeavors to keep us well.

In truth, paradoxical as it may seem, it is in health that we ought chiefly to look to the physician and to avail ourselves of his skill. We should listen to what he says about how we are to keep out of his hands, about regimen, diet, hours, occupation, etc.; and the next best thing is, to consult him, not when we *are*, but when we are *going to be*, ill; when we are getting "out of health," as the phrase is.

As to the universal principle of homœopathy, I must say that the assertion of one "universal principle" on which all diseases are to be cured, (like "*similia similibus curantur*") has a mighty occult quackish sound, and looks more worthy Paracelsus than Bacon.

Neither is it quite fair for Hahnemann to charge all other practitioners with uniformly proceeding on some one opposite principle, as "allopathy or antipathy," for neither homœopathy or allopathy was ever heard of till he chose to invent the terms, and, taking one himself, gave the other to all the rest of the medical world.

People may call themselves what they please, but if they apply a term to their neighbors, they should see that it is one that belongs to them.

The medical profession, as represented by the American Medical Association, for instance, or by the teachers in the leading universities and medical colleges of the country, are not "allopathists" at all; but if they must have a Greek name of this pattern, they are *pantopathists*; that is, they profess only this simple doctrine, *to employ any agency which experience shows to be useful in the treatment of disease*. Anything that can make a decent show for itself is sure of a trial at their hands.

Remember this, then, that the medical profession, fairly enough represented by the bodies I have mentioned, have no theory or doctrine which prevents them from using *anything that will do you good*.

If they do not adopt this or that alleged remedy it is because they do not think a case is made out in its favor. They consider the witnesses incompetent or dishonest, it may be, or the evidence

wholly unsatisfactory on its own showing. Our friend seems anxious to borrow some remedies from the disciples of Hahnemann. Does he remember how rapidly any real discovery is appropriated and comes into universal use? Take anæsthetics (mercifully granted to a world grown sensitive in proportion to its culture); take the use of the bromide of potassium; and see how easily they obtained acceptance.

If he is disposed to think any of the fancy systems has brought forward any new remedy of value, which the medical profession has been slow to accept, I ask him to name it. Let him name one—the best his system claims—a single new, efficient, trustworthy remedy, which the medical profession can test by the *experimentum crucis*, as they are ready to test before any scientific tribunal, opium, quinine, ether, bromide of potassium. There is no such remedy on which any of the fancy practitioners dare stake his reputation. If there were, it would long ago have been accepted, though it had been flowers of brimstone from the borders of Styx or Cocytus.

Pardon me, if, in conclusion, I just hint that the writing of defences of homœopathy, by a practitioner who claims to be a “regular,” is, to say the least of it, rather quackish, and altogether uncalled for.

If our friend “Senex” was as zealous in behalf of legitimate medicine as he is for homœopathy, he would soon find himself *au courant* with the vanguard in the onward march of practical medicine, and far beyond the pale of such an *ignis fatuus* as homœopathy. For in his zeal he has become quite a homœopathic knight-errant or evangelist. But if I were a homœopathic doctor I should say of all such amateurs, “*Non tali auxilio.*”

Respectfully yours,

WILLIAM E. BRANDT, M.D.

HANOVER, INDIANA.

Selections.

Management of the Obstetrical Forceps. By C. C. P. CLARK, M.D.,
Oswego, N. Y. A Paper read before the New York State
Medical Society.

In the fast growing and ambitious cities of the West, it may often be noticed that more attention is given to laying out and grading new streets, than to keeping in good condition the old thoroughfares of daily business. In these last, masses of refuse will be seen to hide a dilapidated pavement, while far out on the city's verge the surveyor and the paver are busy.

In our own art, if I mistake not, there is, in like manner, an eager pursuit of novelties, to the harmful neglect of principles and methods that are of daily application. I shall offer in this article some reasons for thinking that the rules and modes of using the obstetrical forceps have suffered this neglect, and I shall make some suggestions for their improvement.

Notwithstanding the indisputable fact that only a few experienced obstetricians acquire such dexterity and confidence in the use of the forceps as to resort to it freely, it may still be truly said that the whole armory of our art furnishes few instruments that are so useful in saving life and in lessening suffering. I think it furnishes none that are so capable of serving these ends. It fails of doing all it might do, because of the real or supposed difficulties and dangers that attend its use. Many an obstetrician, skilled and ready in everything else, is afraid of the forceps. Distrusting his own dexterity, and fearful of possible evils, he rarely or never resorts to this instrument. To the neophyte it is a terror.

I think the consciousness of my young readers and the recollection of their elders will give consent when I say that no operation in instrumental therapeutics is more dreaded by the novice than the delivery of a parturient by the forceps. I, for one, shall never forget the anxiety, the agitation, the sinking of the heart, the fear of failure, and, worse still, of the exhibition of incompetency, that preceded, nor the blind groping with the blades and the vain attempt to remember and apply the precepts of the books, that attended my early trials with this instrument.

Such repelling and unmanning terrors, and such fruitless efforts, be it observed, are doubly unfortunate, when, as in this operation, the crisis to be met is one that occurs to every practitioner, one that he must oftener meet alone, and one whose peculiar urgency is greatly augmented by the impatience, the

anxiety and the expectation of friends, and by the suffering and often the danger of the patient herself.

In my own case I cannot be wrong in attributing these early fears and perplexities to faulty instruction. My purpose in this article is to show that these terrors do not legitimately arise from the character of the operation itself, nor are these difficulties inherent in it; but that they result from the erroneous way in which the subject is taught in books and in schools. I undertake to show that, in many of its most essential particulars, that teaching is defective and erroneous in substance, and in manner unnecessarily complex and obscure. A total want of uniformity in the rules laid down by different authors adds to the perplexity of the pupil.

In place of these obscure, complex, impracticable and discordant instructions, I undertake to give a set of rules that shall be simple and intelligible, that shall be applicable to all cases, and that shall thus rob the operation of its terrors, and make its practice, for obstetricians of ordinary intelligence and dexterity, easy and certain.

The points that I propose to touch upon are:

- I. The danger that attends the use of the forceps.
- II. The exigencies that call for the forceps.
- III. The best kind of forceps.
- IV. The position of the patient.
- V. The law of application.
- VI. The manner of introduction.
- VII. Locking.
- VIII. Slipping.
- IX. Compression of the head.
- X. Management in extraction.

On all of these points I shall venture to differ more or less widely from the received authorities, and I shall discuss only the particular matters in regard to which I thus differ from them.

I. DANGEROUSNESS OF THE FORCEPS.—Is the delivery of a parturient woman by the forceps attended with any considerable degree of danger to her? The general tone of our teachers and text books replies in the affirmative to this question. I shall never forget the earnestness with which that excellent and conscientious instructor, the late Prof. C. R. Gilman, used to impress upon the minds of his pupils the terrible dangers that attend the use of all midwifery instruments. It was his custom, in closing his lecture, to fling them from him with a somewhat theatrical show of terror and aversion, and to warn us in the most impressive manner of the fearful responsibility that accompanies their use. An innocent

pupil was almost led to think that, in certain bad cases of labor, it was pretty much an even thing between letting the woman die a natural death, and twisting her womb off with the forceps, or letting her bowels out with the perforator.

On looking over authors, I find that these terrors are by no means peculiar to Professor Gilman. Cazeaux warns us of "lesions of the cervix and perforations of the vagina." He says: "There can be no doubt that the use of the forceps increases the danger of delivery." Churchill speaks of "laceration of the vaginal parietes, bruising the os-uteri," etc., etc. Blundell says: "In violent hands the long forceps is a tremendous instrument. Force kills the child, bruises the soft parts, occasions mortification, breaks open the neck of the bladder, crushes the nerves," etc., etc. So much is he afraid of wounding the soft parts, that he advises us always to count the pulse between the pains, to see whether we are killing our patient!

It was reserved for Dr. G. S. Bedford to reach the acme of terrorism, and to stir the imagination of his hearers and his readers with the most fearful pictures of ruin wrought by the forceps.

"The use of the forceps," he says, "is too often a scene of harrowing agony to the patient." He speaks of "fractured pelvic bones" and "disparted symphyses;" of "vesico-vaginal fistula," of "occlusion of the vaginal walls and the meatus urinarius," etc., etc., as common results after forceps delivery.

He pretends to support these statements by cases; but the reader who carefully examines these cases will see that they really give his representations no countenance. In the case, for example, which he gives on page 570, the history that he narrates in no way warrants him in attributing the calamitous result to the use of the forceps. It was probably due to the length—three days—and the severity of the labor, and would in all likelihood have been different if the forceps had been used in time. It was probably "masterly inactivity," and not the forceps, that did the damage. I believe that similar criticism will apply to almost all of the cases that are given in books to illustrate the dangers of the forceps; the premises will not warrant the conclusion, and, indeed, the history is generally too imperfect to warrant any conclusion. To me, with some observation and experience of my own, these terrible representations seem ridiculous and absurd. I affirm *that the forceps is not in any material degree a dangerous instrument* to the mother. In my own practice and observation, I have but once seen death follow a delivery by the forceps. In that case the fatal flooding was clearly due to exhaustion and uterine atonicity from too long delay of delivery; the application of the forceps

and the extraction of the child was quick, easy and painless. I have seen some discreditable fooling, and a little cruelty, with the forceps, but I have never seen a case in which there was reason to attribute any injury of the parturient to its employment. When skillfully used it is not only harmless but painless. I never attend a patient whom I have delivered with this instrument without her asking for it again. The forceps is, indeed, a peculiarly innocent instrument. With its curved form and rounded edges it is almost incapable of mischief. It cannot cut, or puncture, or tear, or scrape. Neither can it bruise the soft parts, without the most stupid and reckless violence. As for its being pushed through the vaginal or uterine walls, it would be difficult or impossible to do it intentionally. Injury to the bony parts of the pelvis is equally out of the question.

The proportion of women that die after the use of the forceps is no evidence of its dangerousness; as well might we in the same way argue that bleeding or opium, or any other treatment, is dangerous in puerperal convulsions. Statistics are, therefore, of no value. It is obviously impossible to distinguish between the deaths that are caused by the forceps—if it is claimed that any one is so caused—and those that result from the conditions that called for them, or from other causes. The forceps is seldom resorted to, save in protracted and difficult cases, and in these a considerable mortality is to be expected from causes entirely independent of the instrument.

I will not deny that if the operator, following the instructions of the books, endeavors, obstinately and uncompromisingly, to introduce the long, double-curved forceps into the upper part of the pelvis, with its pelvic curve twisted from accordance with the anatomy of the passage thereto, he may injuriously bruise the maternal parts; nor will I deny that a similar or even greater evil may result if he imitate Dr. Elliott, (*viz.*, his *Obstetrical Clinique*, *passim*), and wantonly and absurdly use such force as to "break" or "bend" a blade, "endanger the integrity of his instrument," "lay out his whole strength with braced feet," etc., etc. What I do claim is, that if he use ordinary anatomical knowledge, mechanical skill and common sense, the obstetrician cannot harm his patient with the forceps, and therefore the conscientious practitioner need never fear to try them. I think it would be difficult to find a single case in the books that, properly interpreted, even tends to prove the contrary. I have not found one. I am substantially supported in my opinion of the innocence of the forceps by Professor Simpson, as the reader will see by reference to his obstetrical works.

I shall not claim that this instrument is ordinarily *as harmless to the child as it is to the mother*. The features of the infant

are in practice often temporarily, and sometimes permanently, disfigured by it, while the bones, and even the viscera of the head, have been sometimes fatally crushed. Dr. Elliott, in his "Obstetrical Cases," furnishes several instances of this. I do, however, claim that these injuries are entirely unnecessary, and proceed solely from want of skill in the operator. It is only when the grasp that the forceps gives is used for the purpose of compression, or to avoid slipping, that the instrument, when properly applied, can do any damage to the child's head. I expect hereafter to show that compression is never necessary or useful, and that, when properly applied, the forceps cannot slip.

The fear that seems to possess many obstetrical authors, of punching off the ears, or peeling the cranium of its scalp in passing the blades, is entirely absurd. Such an accident is substantially impossible. The beginner really need not have the bother of taking care of the child's ears added to his other troubles.

II. WHAT ARE THE EXIGENCIES THAT CALL FOR THE FORCEPS?—This question, in my opinion, admits of a simple and comprehensive answer. The occasion, the justification and the obligation, of using this instrument, are co-extensive and identical. Whenever, in a head presentation, with probable room for the head to traverse the pelvis, and with the os fully dilated or partly dilated and easily dilatable, the longer continuance of unaided labor involves danger either to the mother or to the child, or even a long duration of suffering to the mother, the forceps should be used. I go further; I hold that the forceps is justifiable sometimes in order to cut short the unnecessary protraction of those anxieties of the patient and her friends, that attend uncompleted labor, and even to save the time of the practitioner himself. I am well aware that in this opinion I widely depart from the maxim that authority sustains. Churchill, though reckoned an advocate and defender of the forceps, lays down the rule, in italics, for emphasis, that "they are to be applied in no case, till we are perfectly satisfied that the obstacle cannot be overcome by the natural powers with safety to the mother and the child." It is such a rule as this, causing perilous delay, that makes this instrument, in crude statistical tables, seem the means of death. I repudiate this rule. It is a rule that may be fitly followed by those who believe the operation to be difficult or dangerous, but it is not one for me, who think I find it as easy as the passing of a catheter, and as innocent as giving an enema.

As it is not my purpose to write a systematic treatise on the forceps, but only to touch upon those matters where I think the existing practice is erroneous, I shall not enumerate and discuss in detail the many items that are comprehended in the rule that I

have laid down, but shall content myself with some observations on certain supposed limitations of it that are to be found in the text books. Those limitations that hang on the supposed dangerousness of the operation I have already sufficiently discussed.

It is said that great violence of the pains contra-indicate the forceps, on the ground that a reinforcement of the expulsive power would be dangerous. This doctrine is entirely erroneous. The use of the forceps in such cases, in addition to its ordinary advantages, saves the womb from some part of that perilous violence of muscular action that, beside minor evils, sometimes threatens even its own integrity.

Neither is extreme resistance or rigidity of the soft parts a contra-indication. It is even an indication. If rigid perineal tissues be the obstacle, the danger of their laceration will be lessened by the forceps. The wedge-like form of the proximal end of the locked blades is an important aid in dilatation. It prepares the way. Meantime it diffuses the bearing of the uterine force along the longitude of the vagina, lessening its intensity at any point. On the other hand, so far as the resistance is due to the action of the perineal muscles, greater mechanical force in overcoming it is no way objectionable; and it can certainly be more cheaply furnished by the arm of the obstetrician than by the uterus of the mother.

Moreover, the experienced practitioner will remember that a majority of the cases of laceration of the perineum occur when, after long delay at that point, and many ineffectual pains, the uterus, as if vexed by the futility of its efforts, with one tremendous throe suddenly bursts through the obstacle. Reflex power, when repeatedly foiled, does thus accumulate. The forceps, by securing the steady progress of the head in some degree, obviates the danger.

Besides this, it is to be remembered that laceration of the perineum seldom or never occurs, save when there is a congenital deficiency of the elastic tissues of the vulva. This imperfect development may be hardly appreciable, or it may approach atresia. If it exist in even a slight degree, laceration of the parts is perhaps inevitable. Whatever the degree of danger may be, it will not be increased by the forceps unless the final delivery be wantonly and violently precipitated. The additional bulk made by the blades is next to nothing, and is more than balanced by the slight elongation of the head that almost necessarily attends their use. Meantime their wedge-like shape, beginning earlier the dilatation of the external parts, necessarily makes it more gradual and therefore safer.

Not a few authors declare that the use of the forceps should not be attempted when the head is above the superior strait. I can conceive of no good reason for this limitation. The operation

under these circumstances is somewhat more difficult to the inexperienced, and is sometimes impossible, but it is entirely free from the objection of peril. When the waters have escaped, tonic uterine contraction generally holds the head firmly against the inlet of the pelvis, with a larger or smaller segment of it engaged therein. In this condition a tolerably expert operator will have no great difficulty in grasping it with his instrument, and, if it be not detained by insuperable mechanical obstacles, delivery can be readily effected. On the other hand, when, from deficient tonicity of the uterine walls, or from the presence of a considerable quantity of amniotic fluid, or from both of these causes combined, the head is freely movable or floats above the pelvic brim, the attempt to apply the forceps will be of doubtful success. Turning is then the surer resource. This exigency may co-exist with hemorrhage, convulsions or other accidents calling for speedy delivery; but it can hardly obtain in any of the forms of dystocia proper, save in that in which there is so considerable narrowing of the pelvic brim as to make impossible any other means of delivery than embryotomy. The principal source, in my opinion, of the objection that many authors entertain to the use of the forceps when the head is in high situations, is in their utterly erroneous mode of applying the instrument. It is this that makes very many respectable authors oppose its use even when the head is already engaged in the superior strait, and needs but the touch of skill to cause it to finish its course.

III. WHAT KIND OF FORCEPS SHOULD BE USED?—To the possessor of the long, double-curved forceps, the short forceps is utterly useless. Everything that can be done with the latter can be done with equal facility, safety and painlessness with the former. The obstetrician who sports both kinds, must be of a piece with the well-known gentleman who directed his carpenter to make in his garret door a big hole for the old cat and a little one for the kittens!

Equally unnecessary is it, in my opinion, to have several different forms of the long forceps. The editor of Prof. Simpson's *Obstetrical Works* reports him as saying, that "the more frequently he applied the forceps the more firmly he became convinced that one pair, of proper form, would answer for all forceps cases." (Vol. I, p. 442.) I entirely coincide in this opinion, and in the last fifteen years of tolerably extensive obstetrical experience have had occasion to touch but one pair. I am, accordingly, quite unable to appreciate the practice, in this particular, of Prof. Elliott, who, in his "*Obstetrical Cases*," reports himself as often trying several pairs in succession in the same labor. He seems to carry about with him as many tools as a carpenter or a burglar. This, of course, is not done for effect. He may safely trust more to his own skill and less to the skill of his instrument maker.

The exact shape of the blades and the mode of locking have been the subject of a great deal of attention, and of many modifications and supposed improvements. One would imagine, from the amount of ingenuity that has been expended on the subject, that accoucheurs were in pursuit of a key to open some intricate lock, and not of a pair of slender artificial hands to glide along a passage of well-known shape to a position that our own hands cannot reach, and to clasp there simply an ovoid body. All of the modes of locking are good enough; and I am inclined to think that the slight differences in the shapes of the modern instruments are not very material. The instrument that I use (and of course think the best that was ever made) is called in Paris "Dubois" forceps, and was made by Charrière of that city. It is considerably longer, and somewhat more pronounced in its pelvic curve than Simpson's or Elliott's, and, in my opinion, is therefore better. I have not found it necessary to add to it the sliding guard of the latter inventor.

IV. THE POSITION OF THE PATIENT.—The expert operator can apply the forceps equally well with the parturient on her side and on her back. The former position has this advantage, that, since women in this country are generally confined on the side, the arrangements for the operation in that position are less disturbing than in the other, and therefore less menacing to the imagination of the patient. This position also gives better access to the field of operation. I shall however recommend the other posture; for the reason that it better enables the practitioner to see, *with the mind's eye*, the anatomy, the mechanism, and the physics of the matter in hand. It is the position in which bodies are dissected, and in which we are in other ways most familiar with the female pelvis. In addition, this posture is symmetrical with the posture of the operator while operating—a fact which greatly facilitates both his conceptions and manipulations.

V. THE PRINCIPLE OF THE APPLICATION.—The grand question in the use of the obstetrical forceps, is, *whether the law of their application should have relation to the particular presentation of the head, or to the curve of the pelvic axis; to the anatomy of the child, or to the anatomy of the mother.* Shall we have regard to the theater, peculiar and nearly invariable in form, and definitely limited in extent, in which our operation is to be conducted, or to the posture in which the object to be seized may chance to lie? It is the former of these alternatives that the American, English and French authors that happen to be within my reach, unanimously adopt. Most of them say that the blades of the forceps should be applied "to the sides of the child's head," "parallel with the parietal bones." Even those who admit a less exclusive rule, substantially coincide with Prof. Bedford,

who declares: "It is the position of the head that should determine the position of the blades." (Principles and Practice of Obstetrics, p. 558.) The same doctrine is taught by all the public lecturers on obstetrics that I have had the opportunity of hearing. In short, this is the principle that the American student finds everywhere laid down. It is not necessary to multiply quotations.

Prof. Simpson, it is true, appears to be partly aware of the absurdity of this rule. He says (Obstetrical Works, vol. I, p. 440), that "the application of the long forceps to the lateral or aural-surfaces of the child's head at the upper strait, as described by Burns, Dewees, etc., and pictured by Churchill, is impossible in the very cases in which they are generally required;" for these reasons, among others, that "their pressure would greatly endanger the urethra and bladder in front," and "that they could no thus be placed in the axis of the brim, in consequence of the pressure of the perineum upon the instrument below." He makes like objections to the mode of application taught by Deleuyre, Davis and others, and illustrated in Ramsbotham. But when Dr. Simpson comes to lay down a method of his own, he falls into the same fundamental error as those whom he condemns. He directs the blades to be applied upon a certain diameter of the head. In other words, he teaches us to be governed by the *presentation*, and not by the maternal anatomy.

In my opinion this rule is entirely erroneous. I believe that the blades should simply follow the course of the utero-vaginal canal, and, when applied, should, in all cases, be in accord with the curve of the pelvic axis, regardless of the presentation. I believe that the presentation is not of the slightest consequence, and cannot be advantageously, or, in many cases, even innocently regarded. Wherever the sides of the head may be, the blades should be applied to the sides of the pelvis. I should perhaps hesitate in thus rejecting the traditional and uniform instructions of our authorities, did I not find it casually mentioned in Cazeaux, p. 802, that the method that I recommend is the practice of at least a part of the profession in Germany.

If the received doctrine on this subject be an error, it is a very grave error, and leads to very grave evils. The first of these is that it imposes upon the operator the necessity, as a preliminary step, of ascertaining the presentation. Even to the experienced practitioner this is not always easy; to the neophyte it is always difficult and uncertain. Knowing it to be so, he is never sure that he is handling his blades rightly. This doubt is a constant source of embarrassment and hesitation, and often makes him withdraw and introduce a blade again and again.

A far greater evil is that this doctrine necessarily makes the rules to be followed exceedingly complex: for the modes of introducing and applying the forceps must be as various as the

presentations. Accordingly we find in all our authors a great variety of rules for the different presentations. Cazeaux gives special directions for each of eight vertex presentations when the head is at the inferior strait. Above that point, vertex presenting, he makes still other varieties of procedure. In face presentations he gives us similar changes in the modes of application.

Dr. G. S. Bedford has four variations in the application of the forceps at the upper, and four at the lower, strait. After these comes a miscellany of some half a dozen other modifications.

Dewees says, "the forceps should be applied to the sides of the head." He has four variations in this operation for the seven primary presentations that he counts, and still others for the more rare and difficult presentations.

Meigs lays down the same rule, "that the blades are to be applied to the sides of the head, and makes as many variations in the operation, some ten or a dozen, as consistency seems to him to require. His whole chapter on this subject is worth reading as an example of "confusion worse confounded."

Churchill says, that "at the brim of the pelvis the forceps may be applied in the transverse, the oblique, or the antero-posterior diameter, etc., etc., according to the presentations."

These references to popular authors, selected at random, are sufficient to show the extreme complexity of the rules for delivery by the forceps—as they are presented to learners at the present day.

It will be worth while for those who are curious on the subject to follow farther this comparison of obstetrical authorities. They will not fail to notice that, true to the native inconsistencies of error, the directions given in the different text books follow no common law or principle, but are various and conflicting in the utmost degree. The number of varieties in the mode of application is from three to more than a dozen. Some authors give different directions according as the head is at the upper or the lower strait, or between these points; others make no distinctions. Some make a difference in their instructions, according as the long or short forceps is to be used, others treat of both in the same words. So greatly unlike are their descriptions of the proper way of introducing and managing the blades, of the direction of the handles, etc., etc., in any particular presentation, that a reader would not suppose they were treating of the same case, or even the same subject.

What is the reason of these discrepancies and this confusion? Truth is always simple. The handling by learned and experienced men of a subject so long familiar to the profession as this has been, ought to exhibit the simplicity, uniformity and exactness of scientific truth. It exhibits in our leading authors none of these qualities. The cause is, that the principle with which they start,

and on which their reasoning and descriptions are based, is essentially and totally erroneous. It is *not* the presentation that should govern the mode of application. However the head may present, the law that should govern the position of the blades is one and the same.

That law is, that the pelvic curve of the forceps shall follow and coincide with the utero-vaginal curve.

For what purpose, let me ask, is the pelvic curve given to the long forceps, unless it is to accommodate the shape of the instrument to the anatomy of the mother? It is only a single line of direction that this curve can fit, that is, the line of the pelvic axis, and it will bring the blades symmetrically against the sides of the pelvis, with the convexity of their pelvic curves following the bend of the sacrum. The curve of the sacrum and of the vagina, and the resistance of the floor of the pelvis—elements so powerful that in every labor we see them change the direction of the head by more than a quadrant of a circle—must be fully regarded, not only in the form of our instrument, but also in the position in which it may be placed in the utero-vaginal canal. Obvious as this would seem to be, I look in vain among the authors within my reach for the due acknowledgment of its importance.

I assert that till the head is actually at the outlet of the pelvis it is substantially impossible to apply the forceps in any other than the manner I have indicated. A slight deviation of the instrument toward an oblique diameter I admit to be possible, but its own shape and the laws of mechanics confine that deviation within narrow limits. How can you place the blades along the parietal bones when the plane of those bones makes an angle with that part of the pelvic axis in which the head is situated? Or how can you, without undue violence, lay them there when their pelvic curve must widely divert from and antagonize the curve of the maternal passage? The curve of the vagina still exists even when that canal is dilated to permit the passage of the head: can it be disregarded in the mechanics of forceps delivery? If we compare the distance, following the sacral curve, between the posterior commissure of the vulva and the posterior edge of the pelvic brim, with its anterior counterpart, it will be obvious that the blades, one following one line and the other the other line, cannot be brought squarely and symmetrically to embrace the head, without forcing their hands violently back to the very coccyx. Nor, when the head is at the superior strait, can it be done even thus. Nevertheless these are the virtual impossibilities that authors and lecturers, in the most matter-of-course way, call upon us to perform. They hardly ever suggest a difficulty or a doubt. Their language would make one think that the forceps can be played about in the female pelvis, with its pelvic curve bulging this way or that, as freely and easily as in an india rubber bag or in a barrel.

To cap the climax of absurdity, our professors illustrate their instructions on that most useless and preposterous of all human contrivances, called by Dr. Meigs, with unconscious appropriateness, "the Phantom." I well remember, as a pupil, spending hours over that effigy, learning, as I innocently supposed, to apply the forceps to the sides of the head when it presented in this, that and the other position. Nothing could be less like nature, and nothing, therefore, could be less instructive. It was like breakfasting on the morning fog. You might as well practice passing a catheter on the town pump.

I admit that when the head is at the pelvic outlet, the forceps may be applied to it in any of the diameters of that outlet. But even here the blades are best applied to the sides of the pelvis; for only thus will they be in symmetrical and easy relation to the maternal parts. The application of them in an antero-posterior position, or in a position approaching that, involves straining back the perineum in a painful and injurious manner, and threatens harm to the soft parts that underlie the pubis. For these evils this mode of application has no compensating advantages.

I shall be asked to reconcile the position I take in this matter with what authors represent themselves as doing. I prefer not to undertake to do this. When a man describes the application of the blades of the forceps antero-posteriorly at the upper strait, he describes what is impossible. Let me add that many times operators deceive themselves with regard to the direction in which the blades are passed; and many times authors, in their descriptions as well as in their maxims, blindly follow the beaten path.

If I am deemed guilty of unwarrantable audacity in speaking thus of our obstetrical authorities, I shall shelter myself behind the quotation that I have already made from Professor Simpson, If Burns and Dewees and Churchill describe impossible processes, and even sketch them for the engraver, as he says they do, why may not the most modern book-makers err in the same way? I am of the opinion that they do so err. I think, moreover, that it is entirely proper for any practitioner to repudiate authorities that are so utterly inharmonious as those that now bear sway in this matter of the application of the forceps.

Professor Elliott, though he follows the rest in instructing us to obey the presentation and apply the blades along the sides of the head, betrays the idleness of the rule when he says, page 300: "In difficult applications they will generally be applied over one of the oblique diameters of the foetal head." Inspection of the head, after delivery, will show that they almost invariably lie upon the head in this manner, and almost never along the parietal bones.

An inspection of the cuts for illustrating forceps delivery that are to be found in treatises on midwifery, will show that the

representation of impossibilities with which Professor Simpson charges Churchill is sometimes avoided by making the picture entirely inconsistent with the text. An application in an oblique diameter of the pelvis is described in the text, while the illustration of the forceps in position represents the instrument laterally applied, the locked handles being unmistakably in the plane of the transverse diameter of the pelvis, and resting squarely against the perineum. The fact is that a properly constructed blade of the long forceps, when once engaged between the head of the child and the wall of the vagina and pushed home along that canal, has, from its very shape, so strong a tendency to settle into the position to which alone its double curve is adapted, that only the perverse misdirection of ill-taught and violent hands can make it go astray. This is the reason why the young accoucheur, after repeated but futile efforts, has often found his instrument strangely and unexpectedly slip into its place just when he was despairing of success and had almost ceased to try.

It is easy, too, for older operators, when the greater part of the blade is buried out of sight in the pelvis, to be deceived with regard to the direction it is taking, double curved as it is, and to erroneously believe that its whole course is on the line in which it began.

There are two ideas whose influence seems to have kept the minds of obstetric teachers fixed on always aiming to apply the blades of the forceps to the sides of the child's head. The one has relation to the safety of the child, the other to facilitating delivery by getting hold of the head endwise. In regard to the first, it is true that the blades so applied will "fit" somewhat better than when applied in any other diameter, but the head is so near a globe in its form that the difference in the fit or in the security of the hold is not material. The immunity of the child, in bone or feature or viscus, is never endangered by the proper use of the forceps. The obstetrician whose instrument disfigures the new-comer is a bungler whose only excuse is that he was taught in a bad school. Forcing the end or the edge of the blade into the child's tender flesh is a barbarous result of that stupid idea in obedience to which we are told to *compress* the head in order to diminish its size or to prevent the instrument from slipping from its hold.

I shall, of course, admit that the head will pass easiest endwise; but I deny that the forceps can always be applied parallel with the long diameter of the head and along the parietal bones, and thus insure that facility. Whatever can be done by this instrument toward bringing the head into the most favorable position for delivery or toward directing its progress, will be best done by applying the blades symmetrically along the sides of the pelvis, fixing the head between them as in a frame, and, having it thus

under control, giving to it whatever change of position or direction may be advantageous and possible. It will certainly be much easier to give your locked instrument a departure from mesial and symmetrical relation with the pelvis than to place the blades separately in that departure. It is safer, too; for the locked blade can move only with its fellow and with the enclosed head. Even in the most untaught or incautious hands its end or its edge can now do little harm. The locked forceps, applied in symmetry with the pelvis, may be regarded as an absolutely innocent instrument. With the enclosed head it may glide, or turn, or roll in the pelvis to some small extent, but it cannot jam, or cut, or tear, or bruise the maternal parts.

If it be true, as I have endeavored to show, that the obscure, complex, contradictory and multiform rules of the books are based on an erroneous principle, their abrogation is of the highest importance. Even if they were sound, their multiplicity and variety would make it impossible to remember them, while their obscurity would often make it difficult to understand them. When to this we add that their correct application presupposes that the practitioner can make himself sure of the presentation, which for most of us is often difficult, and for many of us sometimes impossible, it needs no argument to show that under their guidance the young obstetrician is indeed in pitiful straits.

Whose heart does not sink at the remembrance of his own first forceps case? Let the scene come back. His mind already possessed by the bugbear of the danger and difficulty of the operation, the novice first gropes and studies and sweats over the diagnosis of the presentation. Only partly sure of this, he next endeavors to find in his memory the special rule of the case. Is it strange, that, with such a mixed sea of authorities on this point as the books present, the endeavor is often vain? Nevertheless, he must go on. This is no time for delay or hesitation. He enters a blade. Practical difficulties now meet him. The blade will not go to its place. He is balked. Fears possess him. He doubts the correctness of his diagnosis, he doubts his memory, he doubts his skill. Confiding youth! it never occurs to him to doubt the soundness of his teachers. He begins to fear that he shall harm his patient; lacerations, ruptures—God knows what!—rise before his mind. He withdraws his instrument. He tries again, and perhaps, by chance, succeeds; or, failing a second and a third time, he sends for counsel, to find it, perhaps, as helpless as himself; or, no professional aid being within reach, he makes shielding excuses to the friends, of "contracted pelvis," or "slipping instruments," or "abnormal bulk of head," and resorts at last, more to be pitied than blamed, to the deadly perforator.

Is this not a true picture? And must not that young man be sustained by an exceptionally courageous heart who ventures to

take his forceps in hand, save on the pressure of dire necessity, or of that public opinion of the lying-in-room which, direr still, calls upon him to show himself equal to every emergency, or to prepare to meet the sidelong glance of distrust, and even the pointing finger of contempt?

VI. THE MANNER OF INTRODUCTION.—The principle of applying the forceps, according to the presentation, being thus proved to be illusory and impracticable, it remains to substitute for it a rule to which the obstetrician may safely trust in this important operation. Such a rule, simple to understand and easy to follow, is, in my opinion, not difficult to find. It is, that, in conducting the blades along the pelvic passage, and in grasping with them the head of the fœtus, we shall disregard entirely the presentation, and have regard only to the curve of the vagina and the contour of the pelvic cavity. The mind's eye must simply see a rounded body lying in the utero-vaginal canal, while the hand, obeying the anatomy of that canal, directs each blade of the forceps so as to pass around and embrace it.

Let this be established as the rule, and the operation becomes free from complications. It is no longer necessary to remember the endless variety of rules with which authors are filled. One simple law is in all cases to be followed, but two anatomical elements are to be held in the mind, and a uniform manipulation is to be executed.

It is, moreover, no longer necessary, as a preliminary, to ascertain the presentation. If there are those who assert that this is no bother, and who set me down as wanting the *tactus eruditus*, I shall simply ask them what they will do with the table given in Simpson's *Obstetrical Works*, ser. I, p. 414, according to which the ratio of occipito-posterior presentations to other presentations found by different experts, varies from 1 in 1336 to 1 in 3 or 4? or with the table given by the same author on the next page? I dare to assert, that if it be necessary to know the presentation before applying the forceps, the old rule of waiting till you can "feel the ears," is still a sound one.

I am well satisfied that the operation is, in fact, usually performed, sometimes intentionally, and sometimes unintentionally, on the principle that I have laid down above, and I confidently believe that my position will not need to be supported by authorities in the judgment of men of experience. But it is still necessary to introduce the doctrine into the books, and lay it before the generations of learners. It is for those that have the art of the forceps still to learn that I write.

If it be true, as indicated by Cazeaux, that this simple and easy rule of practice is somewhat generally followed in Germany, the fact will explain what we find in the statistics collected by Churchill. (*Midwifery*, p. 339, *et seq.*) It seems that the German practitioners

there mentioned resort to the forceps nearly three times as often as do the English. It explains, too, why, as we are told by the same author, the Germans report a very small proportion of crotchet cases, and a very small fatality among children after the forceps.

Let us now approach the bedside of the patient, and proceed to perform what has properly been called the "obstetric miracle."

The first question that arises is: Which blade shall first be introduced? In regard to this little matter, singular obscurity and confusion will be found in authors. The individual blades are variously and loosely designated as the "upper and lower," "right and left," "male and female," "anterior and posterior," etc., and I nowhere find a uniform law of precedence clearly laid down. Such a law is, nevertheless, easily pointed out. That blade is to be entered first, which, when both are introduced and crossed, will be next the posterior commissure of the vulva. A moment's inspection of the lock will show which this is. It may most properly be called the posterior blade, and as the forceps are commonly constructed, is that one that must find its place in the left half of the pelvis.

Now, while the operator, with one or two fingers of his right hand supine, touches the scalp well back toward the sacrum, let him take this blade near its centre of gravity, with the fingers of the left, and holding it nearly perpendicularly, but a little inclined to his own left, slide it into the vagina along the palmar surface of his hand, till its extremity is engaged between the head and the maternal parts. From this point it is not the touch of the operator, but the imagination, the mind's eye, informed by anatomical knowledge, that must guide his motions. While he gently pushes along the blade, he must remember both the oval of the head and the bend of the vagina, and both the cranial and the pelvic curves of his instrument. He must remember, that while the point of his blade follows the utero-vaginal canal, it must so follow it as to bring its flat concave, not behind, but alongside the head, and its concave edge under the os pubis. In order to accomplish this double indication, the handle, as the point of the blade advances, must describe an intermediary between two curves. While it comes backward toward the operator and downward, it must also go outward toward his left and downward, and must describe in each of the two curves near a quarter of a circle. In other words, while the blade, in respect of its cranial curve, obeys the contour of the head, in respect of its pelvic curve it seeks the bend of the pelvic passage, and in order to adapt itself simultaneously to both, it must follow a spiral that contains them both.

In order that the young obstetrician may study the movement of his blade in detail and guide it most intelligently, it may be well for him, holding it as above described, at first to follow with its extremity simply the curve of the child's head, bringing the handle

backward and downward, but not outward. As the blade advances deep into the pelvis, its convex edge will come to press against the right side of that cavity, its pelvic curve antagonizing in part the utero-vaginal curve, and the strain will resist its further progress. Now let him add to this movement obedience to the pelvic curve, by carrying the handle also outward and downward, and this convex edge will be turned gradually toward the sacrum, with whose curve its own contour is in harmony, and the before reluctant blade will glide along as if by instinct. Thus enlightened by watching his own progress and seeing the reason of it, the dullest disciple will hardly find difficulty in accomplishing the subsequent steps of the introduction. Whenever the onward progress of the blade is resisted, he will almost invariably find it due to an excess of one of the two above-described elements of the combined or spiral movement; and gentle trial of them separately will show him in which direction easy progress lies.

The double or spiral movement described is to be carried on till the handle is brought into the mesial plane of the body and firmly back against the perineum. The novice will be surprised at the length of the road he has to travel. Let there be no fear of passing the blade too far. There is no danger of doing this. After surmounting the convexity of the head, the end of the blade will necessarily approach the mesial line, and its impingement upon the body of the child will arrest its progress at the proper stage. From the opposite error great evils arise. From not carrying in the blades far enough it comes that they refuse to lock, and that their ends may be made to cut the scalp or gouge out the eyes, or may slip from their hold. The second or anterior blade is to be passed to its place in precisely the same way, *mutatis mutandis*, as the posterior blade.

The introduction of the hand into the vagina, as recommended by some authors (Bedford, for example), for the purpose of guiding the blade of the forceps, is an entirely superfluous piece of barbarity. The obstacle that often resists the onward motion of the blade is not a fold or cul-de-sac of the soft parts, whether of the mother or of the child. It is some false direction of the blade; and it usually and naturally results from the attempt of the practitioner to follow the erroneous rules laid down in the books. In my opinion there is no danger of punching a hole through the utero-vaginal cul-de-sac. When the edge of the os is beyond the reach of the finger, it has so far disappeared into the adjacent walls, that the extremity of the blade is in little or no danger of catching outside of it; and whatever danger there may be, is easily obviated by hugging a little the head of the child. The fear of punching off the ears of the child or of peeling its head, which are expressed by some authors, are not deserving of attention.

Most authors direct the first blade, when introduced, to be given

to an assistant to be held in place. This is generally unnecessary. When the blade is pushed to its proper place and its handle carried well back, it will stay there.

VII. LOCKING—Probably there is not one of my readers, that, in his first essays with the forceps, did not have great trouble in making the blades lock. Even with experienced accoucheurs this is one of the most common and embarrassing of the difficulties that are met with. What solution of it is furnished by authors? None, or worse than none. The best they have to suggest is, to withdraw one blade or both, and try again. This is a sort of "scribe" rule, "cut and try" or "rule of thumb," that certainly does no credit to a learned and scientific profession.

Cazeaux recommends, in addition, that when one or both blades "turn outward," "the handles shall be grasped by the whole hand." What this means, unless it be an attempt to *force* them into place, it is not easy to see. If it means that, it is a vile rule. Dr. Bedford lucidly informs us, in page 588, that when the blades have embraced the head, the accoucheur will be able, "by judicious manipulation," to lock the forceps! This is highly instructive! What is "judicious manipulation"? The whole operation of the forceps is done by "judicious manipulation." Professor Meigs, page 558, speaks of "pushing" the blade this way and that, in order to bring it into a position to lock. These are fair samples of the guidance that the practitioner will find in the books in this important emergency. It is in default of better instruction that in our early trials we introduce and withdraw the instrument again and again, and, it may be, utterly fail at last. I cannot think that men who can furnish no better rules than these, fully understand the forceps. I believe that two simple precepts may be given that will almost invariably secure quick and easy success in locking the blades. These are: to push the blades far enough along, and to carry the handles far enough back against the perineum. The first step places the blades fairly upon the head, the second carries them back into the axis of that part of the utero-vaginal curve in which the head is situated; and, the blades being now symmetrical to each other, the handles must necessarily cross each other in the same plane, and will, therefore, lock. All ordinary cases of failure to lock, provided that the blades are laid anywhere in the neighborhood of their proper place, are due to deficiency in one of these particulars. These two steps of final adjustment, it will be observed, are but the continuation and completion of the process of applying the blades which I have already described; but their exactitude may properly be left till both blades are introduced and crossed, when if they do not lock, the fault almost always will be found to be in the incompleteness of one or both of these steps. In disproportionately roomy pelves, the course and position of the instrument not being normally controlled by the shape of that

cavity and of the head, one or both of the blades will sometimes need to be slid towards the pubis. A deformed pelvis may make another exception to the sufficiency of the rules above given.

VIII. ARE THE FORCEPS LIABLE TO SLIP?—This is an important practical question. The reader will observe that in a considerable number of the cases in Dr. Elliott's "Obstetrical Cliniques" the forceps "slipped." Professor Meigs is so much afraid of this accident that he directs us to keep the finger against the head of the child in order to detect its incipience. In short, nearly all of our standard authors warn us against this danger. My forceps never slip, and in the face of these authorities I unhesitatingly assert, that in all ordinary proportions of the head and pelvis, with decent instruments correctly applied, the danger of slipping is wholly imaginary. Properly embraced between the blades, the head no way tends to slip from between the edges, either forward or backward; nor is there room for it to do so. Equally impossible is it for their ends to override the bulge of the cranium and let them come back to us empty. They must do this simultaneously if at all, and this will involve such wider separation of their bellies as the limits of the pelvic cavity do not admit. They certainly cannot slip over the head and come away without occupying more room in their void grasp than they would in bringing the head along with them.

When the forceps slip it is because the blades are not passed far enough to truly embrace the head. Their ends rest against it on or near its bulge, instead of reaching nearly or quite to the cervical region. This is the explanation of all the cases of slipping that I have ever seen, or can imagine. The instrument slips off because it has never been on. The question is important, not because the slipping of the blades can do any material harm, but because the apprehension of it is sure to lead to the wicked practice of violently

IX. COMPRESSING THE HEAD.—So far as the danger of slipping is concerned, I think I have shown that this is entirely unnecessary. The degree of compressing force that is necessarily used in grasping the instrument is all that is required, in any permissible exercise of extractive power, to make sure the hold of the forceps when properly applied, even in a disproportionately roomy pelvis.

But our authorities, moreover, with a good degree of unanimity, instruct us to compress the foetal head in order to promote its elongation, and thereby facilitate delivery. Indeed, according to Prof. G. S. Bedford (*Principles and Practice of Obstetrics*, p. 575), "accoucheurs are divided as to whether the forceps acts principally as a compressor or an extractor." I can but regard this doctrine as erroneous and singularly unreasonable. The compression of an

elastic body, while it diminishes one diameter of it, necessarily tends to increase all the diameters that are at right angles to the compressing force. Now it is obvious that there will seldom or never be need of reducing that diameter of the head which the blades of the forceps subtend, and which alone they can directly act upon. The contained must be less than the container, and the very fact that the blades have been passed around the head at the point where it has been stopped, is almost conclusive proof that in that diameter there is room enough. The obstacle, then, must be in another diameter of the head, and compression tending to increase that diameter, must tend to increase the obstacle. For example, it is seldom that a narrowing of any other than the antero-posterior pelvic diameter requires the application of the forceps at the superior strait. (*Vide Simpson, op. cit.*) But this diameter, as I have already shown, cannot be subtended by the forceps; they can only be applied in a diameter nearly or quite at a right angle with it; and whatever compression they are made to exercise upon the corresponding dimension of the head necessarily tends to increase that dimension that lies in the narrowed pelvic diameter, and thereby to increase the difficulty of the case. Whatever elongation of the head may be effected by compression is no compensation for this evil; it is obtained at the expense of an increase potentially of the very cause that demands the forceps. The resistance of the maternal parts to distention is the influence on which we must alone rely to promote elongation of the foetal head.

Whoever is taught to use compression, either to promote security of hold or elongation of the head, will be pretty sure to overdo the matter, and will be in great danger of inflicting serious injury on the child. The iron levers give great power, and in the excitement of the moment that power is sure to be used. Such warnings as Churchill gives, "to limit the force used to what the head can bear without injury," are entirely useless. The benumbed and wearied muscular sense would deceive the best judgment. The injuries that the forceps are capable of inflicting, not simply on the child's scalp, but by compression upon the bones and even the viscera of its head, are well illustrated in Elliott's Obstetrical Cases, pp. 245, 246, 255—271. On p. 246, Dr. E. "changes his forceps in order to use compression with more effect." So far as the child was concerned, the "effect" evidently might have been spared.

X. EXTRACTION.—It would hardly seem to admit of dispute that the extractive power of the forceps ought to be used in imitation of nature, and, accordingly, in the direction of the expulsive action of the uterine and abdominal muscles as modified by the lines of the pelvic passage. Nevertheless, for some incomprehensible reason, we are told by Prof. Bedford, that the force exerted by the obstetrician should be "one-third extractive and two-thirds

lateral." This is also substantially the advice given by Prof. Meigs and other popular authors on midwifery. Such management of the forceps is not in imitation of nature. Nature does not see-saw or wriggle her burden along. Were the walls of the passage as dry, friable and inelastic as those of a post-hole, or were the foetal head so rough and angular as to readily secure a bearing on those walls, this *prying it* out would not be unreasonable; but in reality its oval and gliding surface cannot be hastened along its lubricated and elastic road by working it from side to side. True it is, that, if our first efforts at moving the head along fail of success, we may very properly direct our subsequent tractions, tentatively, a little this way and that, distrusting the correctness of our judgment as to the exact law of the case, and thus learn to aid aright the vis-à-tergo. With this exception, based on the imperfection of human judgment, traction is the only function of the forceps.

It has seemed to me that the common conception of the movement of the foetal head through the pelvis is somewhat erroneous in a very important particular. That traject is far more curvilinear than is commonly supposed. If we compare the distance traveled by the part that emerges from under the pubic arch with the distance that must be traversed by the part that follows the curve of the sacrum, we shall easily see that the head is rotated on the symphysis pubis almost as on a pivot. This must be borne in mind in our extractive efforts; and, at a point to be determined by our judgment, but earlier than is commonly supposed, they should be directed rather to *roll out* than to draw out the head.

The rules that I have thus laid down, especially those for the introduction and locking of the forceps, are sanctioned not alone by my own experience and judgment. More than one of my younger professional brethren have thanked me for my suggestions to them in this matter, and assured me that they had made easy to them an operation that had always before been embarrassing and difficult. I now submit these opinions more publicly to the profession. If my expression of them savors somewhat of disrespect for authority, I trust it will be pardoned. In practical matters of this sort we are far too much governed by authority. I believe I shall have the consent of the great body of our profession when I say that in many other particulars our literature needs a thorough overhauling. It needs it in order to the substitution of simplicity and clearness for complexity and obscurity, to the settlement of questions disputed but not disputable, and to the getting rid of rubbish that has the rottenness as well as the respectability of antiquity.

Editors' Book Table.

[NOTE.—All works reviewed in the columns of the CHICAGO MEDICAL JOURNAL may be found in the extensive stock of W. B. KEEN & COOKE, whose catalogue of Medical Books will be sent to any address upon request.]

Opium and the Opium Appetite. By ALONZO CALKINS, M.D.
Philadelphia: J. B. Lippincott & Co. 1871.

To quote the writer's own language, "is a maze as bewildering to the understanding as it is dazzling to the eye of fancy." It would be difficult to find, in medical literature at least, a more complex mass of useful and entertaining knowledge, drawn from every source, sacred and profane, medical and poetical, statistical and imaginative, from the Bible to the Arabian Nights, from the Saviour of mankind "sed longo intervallo" to the Chicago Temperance Convention. "The syllabus of topics and cases" could be equaled only by the debris of a dictionary that had passed through a threshing-machine. The work is eminently a learned one, and needs for its completion, a glossary to bring it down to the comprehension of an ordinarily educated mind.

The author has evidently mastered the whole literature of his subject, and has presented much that is valuable, while his conclusions are certainly sound and judicious, inasmuch as, deprecating all the pseudo-philanthropic expedients of the prohibitionist, he advocates such modified legislation as will protect society without infringing upon the liberty of its members, and urges the extension of the culture of the vine. While the author's compilation of facts is highly valuable, and of fancies not less entertaining, his style is deformed by verbiage and pedantry, "for he draweth out the thread of his verbosity finer than the staple of his argument."

The attic salt of classical reference imparts a delightful flavor to literature, but there may be too much salt to the porridge, and it is well to remember the rebuke to the pedantry of the Spanish monks, conveyed in the old proverb, "Sermon sin Agostino, olla sin tocino."

Into such a book it is not surprising that many errors should

have crept, but some of these are inexcusable. For example, his own intelligence should have taught him, in defiance of any authority, that on the other side of "Mason and Dixon" the snuff-dippers "do" not "constitute forty" nor even four "per cent. of the population," as can be proved by authority forty times as competent as his own.

His denunciations of the deceptive description of the so-called delights of opium and hasheesh eating, as depicted in the rhapsodies of Coleridge and De Quincey, are just and true. It is not probable that they present any phenomena varying specifically from those produced by alcohol. The reviewer, although practically familiar with the first and second types of intoxication, is not with the third, and hence cannot speak positively under this head. These same illusive pictures have lured many a weak-brained enthusiast to his ruin.

It is a pity that in discussing the subject of stimulation, so-called, in its various forms, writers will not take the trouble to investigate personally the physiology of the alleged process, and no longer content themselves with assumptions upon prescript. They could thus scarcely fail to arrive at a more correct understanding of the true physiological relations of these so-called stimulants, and thereby form more reliable practical conclusions.

W. H.

Selected Obstetrical and Gynæcological Works of Sir James Y. Simpson, Bart., M.D., D. C. L., late Professor of Midwifery in the University of Edinburgh; containing the substance of his Lectures on Midwifery. Edited by J. WATT BLACK, M.A., M.D., Physician-Accoucheur to Charing-Cross Hospital, London, etc., etc. New York: D. Appleton & Company, 549 and 551 Broadway. 1871. Pp. 852. Vol. 1.

The world-wide reputation of Professor Simpson in his chosen department must render this work an exceedingly popular one as it is certainly of marked excellence. Dr. Black, the editor, was assistant, for five years, of Prof. S., and thus acquired an intimate knowledge of his opinions, modes of practice, and writings, which enabled him to perform his part of the labor with correctness and facility.

The American publishers have produced the present volume in their usual excellent style.

The Anatomical Remembrancer, or Complete Pocket Anatomist: Containing a Concise Description of the Structure of the Human Body. Third Edition; with Corrections and Additions by C. E. ISAACS, M.D., Demonstrator of Anatomy in the University of New York. New York: Wm. Wood & Co., 27 Great Jones street. 1871. 12mo. Pp. 265.

The "Anatomical Remembrancer" is so well known to students that it scarcely needs to be further recommended to them. It is a pocket affair, which is characterized as well by correctness as brevity.

We chronicle its issue, however, with peculiar pleasure as showing that the great publishing house which has reproduced it, has not abandoned publication of medical books as we had surmised. Unless our memory deceives us, this is the first medical book they have published or republished the present year. It will gratify many of the profession to hear that this eminent publishing house have not as yet left the field in which they formerly achieved distinction.

Till the Doctor Comes, and How to Help Him. By GEORGE H. HOPE, M.D., M. R. C. S. E. Revised, with Additions, by a New York Physician. New York: G. P. Putnam & Sons, Association Building, Twenty-third street. 1871. Pp. 99.

From what attention we have been able to give this little book we are prepared to recommend it as useful for exactly what it is proposed, and physicians may safely and judiciously recommend it to their patrons.

Practical Midwifery and Obstetrics, including Anesthetics. By JOHN FARMER, M.D., M.A., LL.D., etc., etc. Philadelphia: J. B. Lippincott & Co. London: J. & A. Churchill. 1871. Pp. 237.

Clear and exact, profusely and excellently illustrated, we take pleasure in commending this little book as a companion both for students and "busy practitioners."

Hamilton on Fractures and Dislocations. 1871. Last Edition. Our copy burned. Notice soon.

BOOKS RECEIVED.

A Manual of Midwifery. Including the Signs and Symptoms of Pregnancy, Obstetric Operations, Diseases of the Puerperal State, etc., etc. By ALFRED MEADOWS, M.D., Member of the Royal College of Physicians, etc., etc. First American from the Second London Edition, with numerous Illustrations. Price, \$3. Philadelphia: Lindsay & Blakiston. 1871.

"Those who read the first edition of this work will bear us out in thinking that Dr. Meadows's Manual forms one of the most convenient, practical and concise books yet published on the subject. It was especially good as a student's manual, and the author has, in his second edition, sought to make it of equal value to the practitioner. The part which treats of obstetric operations has been well revised, and has received numerous additions, and the several chapters on Unnatural and Complex Labors likewise comprise much new matter. Upwards of ninety new engravings have been inserted in this edition, and, with a view to facilitate reference, the author has furnished it with a very full and complete table of contents and index. We can cordially recommend this manual as accurate and practical, and as containing in a small compass a large amount of the kind of information suitable alike to the student and practitioner.—*London Lancet*, May 6, 1871.

Dilnberger's Handy-Book of the Treatment of Women and Children's Diseases, according to the Vienna Medical School. Part I. The Diseases of Women. Part II. The Diseases of Children. Translated from the Second German Edition, by P. NICOL, M.D. One volume 12mo. Price, \$1.75. Philadelphia: Lindsay & Blakiston. 1871.

"We noticed favorably the original of this handbook some months ago and suggested that an English translation of it, with notes showing the main points wherein the practice of our medical schools differs from that at Vienna, might be well received. Mr. Nicol has now carried out this idea, and we imagine that many practitioners will be glad to possess this little manual, which gives a large mass of practical hints respecting the treatment of diseases which probably make up the larger half of every-day practice. The translation is well and correctly performed, and the necessary explanations of references to German medicinal preparations are given with proper fullness.—*The Practitioner*.

Acton's Functions and Disorders of the Reproductive Organs in Childhood, Youth, and Advanced Life. By WM. ACTON, M.D. Third American from the Fifth London Edition. Octavo. Pp. 348. \$3.

"We think Mr. Acton has done good service to society by grappling manfully with sexual vice, and we trust that others whose position as men of science and teachers enables them to speak with authority will assist in combating and

arresting the evils which it entails. We are of the opinion that the spirit which pervades it is one that does credit equally to the head and to the heart of the author."—*The British and Foreign Medico-Chirurgical Review*.

Wright on Headaches. A new Edition. Their Causes and their Cure. By HENRY G. WRIGHT, M.D., Member of the Royal College of Physicians, etc., etc. From the Fourth London Edition. Pp. 154. Price, \$1.25.

Mackenzie on Laryngeal Growths. Growths in the Larynx, with Reports and an Analysis of 100 consecutive Cases treated by the author, and a tabular statement of every published case treated since the invention of the Laryngoscope. By MORELL MACKENZIE, M.D., author of "The Laryngoscope," "Diseases of the Throat," etc. Profusely illustrated by wood engravings and chromo-lithographs. Pp. 263. \$3.

The Physician's Prescription Book, etc., etc. By JONATHAN PEREIRA, M.D., F.R.S. Fifteenth edition. Price, cloth, \$1.25; in tucks, \$1.50.

Standard Supply Table of the Medical Department of the U. S. Army, July 1st, 1871. From the Surgeon-General's Office.

The Principles and Practice of Surgery. By JOHN ASHHURST, JR., M.D., Surgeon to the Episcopal Hospital, Surgeon to the Children's Hospital, etc. Philadelphia: Henry C. Lea. 1871.

A Treatise on Human Physiology. Fifth Edition, revised and enlarged. By JOHN C. DALTON, M.D., Professor of Physiology and Hygiene in the College of Physicians and Surgeons, New York; Member of the New York Academy of Medicine; of the New York Pathological Society, etc., etc. Philadelphia: Henry C. Lea. 1871.

A Practical Treatise on Bright's Disease of the Kidneys. Second Edition. By T. GRAINGER STEWART, M.D., F. R. S. E., Fellow of the Royal College of Physicians; Physician to the Royal Infirmary; Extraordinary Member and formerly President of the Royal Medical Society of Edinburgh, etc., etc. New York: Wm. Wood & Co. 1871.

An Introduction to Pathology and Morbid Anatomy. By T. HENRY GREEN, M.D., Lond., Member of the Royal College of Physicians; Lecturer on Pathology and Morbid Anatomy at Charing-Cross Hospital Medical School, etc. Philadelphia: Henry C. Lea. 1871.

Pulmonary Consumption: Its Nature, Varieties, and Treatment.

By C. J. B. WILLIAMS, M.D., F.R.S., Fellow of the Royal College of Physicians; Senior Consulting Physician to the Hospital for Consumption, Brompton; etc., and CHARLES THEODORE WILLIAMS, M.A., M.D., Oxon., Fellow of the Royal College of Physicians; Physician to the Hospital for Consumption, Brompton. Philadelphia: Henry C. Lea. 1872.

Restorative Medicine. An Harveian Annual Oration delivered at the Royal College of Physicians, London, on June 21, 1871.

By THOMAS KING CHAMBERS, M.D., etc. With two Sequels. Philadelphia: Henry C. Lea. 1871.

Cancer: Its Classification and Remedies. By J. W. BRIGHT, M.D.

Philadelphia: published by S. W. Butler, M.D. 1871.

The American Practitioner: A Monthly Journal of Medicine and Surgery. Edited by DAVID W. YANDELL, M.D., Professor of

Clinical Surgery in the University of Louisville, and THEOPHILUS PARVIN, M.D., Professor of the Medical and Surgical Diseases of Women in the University of Louisville. Vols. III and IV. Louisville: John P. Morton & Co.

Medical Thermometry, and Human Temperature. By C. A.

WUNDERLICH, Professor of Clinic at the University of Leipzig, etc., etc., and EDWARD SEGUIN, M.D. New York: William Wood & Co. 1871.

Diseases of the Skin: the Recent Advances in their Pathology and Treatment. Boylston Prize Essay, 1871. By B. JAY JEFFRIES, A.M., M.D.

Boston: Alexander Moore. 1871.

Modern Medical Therapeutics: A Compendium of Recent Formulæ, and Specific Therapeutical Directions. By GEO. H. NAPHEYS, A.M., M.D., one of the editors of the "Half-Yearly Compendium of Medical Science;" of the "Physician's Annual;" late Chief of Medical Clinic of Jefferson Medical College; etc., etc. Third Edition, Revised and Improved. Philadelphia: S. W. Butler, M.D. 1871.

First Help in Accidents and in Sickness. Published with the

recommendation of the highest medical authority. Boston: Alexander Moore. 1871.

Treatment and Prevention of Decay of the Teeth. A Practical and Popular Treatise. By ROBERT ARTHUR, M.D., D.D.S., author of "A Treatise on Adhesive Gold Foil;" etc., etc. Philadelphia: J. B. Lippincott & Co. 1871.

The Young Housekeeper's Friend. By MRS. CORNELIUS. Revised and Enlarged. Boston: Thompson, Bigelow & Brown. 1871.

Essentials of the Principles and Practice of Medicine. A Handbook for Students and Practitioners. By HENRY HARTSHORNE, A.M., M.D., Professor of Hygiene in the University of Pennsylvania; Consulting Physician to the Woman's Hospital of Philadelphia; etc., etc. Third Edition, thoroughly revised. Philadelphia: Henry C. Lea. 1871.

PAMPHLETS.

Recent Advances in Medicine, and their Influence on Therapeutics. The Annual Address delivered before the Norfolk District Medical Society, May 10, 1871, by JOEL SEAVERN, M.D., Boston. Published by vote of the Society.

One of the greatest necessities of modern medical education is instruction in accurate modes of thought, the development of the faculty of comparison, the art of reasoning; and for this, something more is necessary than to load the memory with specific facts from clinical statistics. Of the truth of this proposition no better evidence is needed than what would be apparent from a careful perusal of the "address" before us, which, beginning with a false antithesis, terminates with a possible inference based upon *conjectures*. The author is evidently a believer in specifics, for he thinks specifically, and seems to ignore the possibility of generalizing data.

The subject of the address, as defined by the author, is the question "whether recent advances in medical knowledge tend to strengthen a belief that by the use of remedies we may prevent, arrest or cure those functional or pathological changes in the bodily organs which constitute disease, or a belief in what is called, *par excellence*, rational medicine."

It is fair to assume the first term of the question, as the author's definition of that which is not rational medicine, although the relations of the words *functional* or *pathological* are by no means

so clear to the mind of the reader as they may have been to that of the writer; and while we are perfectly willing to relinquish to him the task of defining a negation, we do not admit that rational medicine is "well enough defined" in any statement which asserts diseases to be the "passing tenants of the body," or that they occupy any such objective relations thereto.

The quotation from Professor Holmes, "that the more positive knowledge we gain, the more we incline to question all which has been received without absolute proof," would seem to involve an essential truth ineradicable by any even of the author's specifics, and we fail to see how such condition of intellectual conservatism can constitute any barrier to the progress of science.

Condemning the French school for allowing "no isolated fact, no personal experience, to contribute to the stock of knowledge, if opposed to the deductions drawn from tabulated records," the author subsequently (page 116) omits "clinical experiences," "as their results are so incapable of exact proof as to be always open to cavil."

"With this lengthy preface, then," the author "proceeds to look into the issue as between nature and art, or the expectant school and the school of treatment;" and, first, after referring cursorily to the advances in the physiology of the nervous system made by the labors of Marshall Hall, Brown-Sequard and Claude Bernard, goes on to the discussion of the "germ theory of disease," and giving Mr. Burdon Sanderson's definition of micrococci or mycrozymes, states that "microscopists, in investigating the causes of the spread of contagious and epidemic diseases, have been struck by the fact that in bodies affected by certain of these, are found various minute organisms which are *supposed* to have had a part in the production of these diseases;" and upon this *supposition*, based upon occasional observation of isolated appearances, the author proposes a reversion to a belief in specific medication.

Does the author mean to assert that these minute organisms have always and invariably been found under the circumstances referred to? If so, it would establish an *invariable* relation between the organisms and the diseases in question, or, if he could still further show that they were not only invariably found in "bodies affected by certain diseases," but were never found in bodies unaffected, he would then have determined an *essential*

relation between them, and then, and not till then, might he with logical propriety begin to test their causative relation. These conditions unfulfilled; the mere fact of the discovery of the association of microscopic organisms with contagious diseases is incidental, and from it, they may be "*supposed* to have had a part in the production of those diseases," and nothing more. Supposition is not demonstration.

Now when the further fact is asserted, of which we assume the responsibility, that microscopists, under the circumstances referred to, have not found, or have failed to find (even though looking for them, which is a strong point for the microscopist) these same organisms; or again have found organisms identical in character (Bacteria, Bacteridia, Baccilleria) in the freshly drawn urine of a patient suffering from traumatic paraplegia, in the alvine evacuations of another, the subject of diarrhea, in the exudations of aphthous stomatitis in another, in every household utensil containing water which had been allowed to stand for a few hours, in street gutters, all within a period of forty-eight hours, in localities distant from each other more than a mile, under social and sanitary conditions the most widely diverse, but always in the direction of the prevailing wind—we ask, what conclusions, bearing upon the specific relations of these organisms to epidemic disease, can be drawn? The organisms were identical; as determined by multitudinous observations, the morbid conditions, with which they were associated, different. Were they the efficient (specific) cause of the paraplegia, of the diarrhea, or of the stomatitis? Did they cause them all? or were they incidentally associated with them all, under favorable atmospheric conditions?

But granting the possibility of the production of such widely different results from one and the same specific cause, it would seem reasonable that they should be susceptible of removal by the same agent, but in the instance referred to, the diarrhea was relieved by calomel, the stomatitis by strychnia, and the paraplegia by—the sexton. We leave these two series of facts to make their own arguments.

The authority next quotes Dr. Salisbury's "belief that measles were propagated by fungi, or their spores, generated in mouldy straw;" and his subsequent "opinion that intermittent fever was the result of smilar spores which abounded in low lands,"

etc. Also, Hallier, of Vienna, who found "in the alvine discharges of a healthy child with common diarrhea, numerous moving and motionless micrococci" "which may be regarded as identical with those of cholera," as also others found in dysenteric discharges.

So, too, he finds these organisms in the stools of enteric fever, in the blood in recurrent fever, in the sputa in measles, in the pustules of cow pox and small pox, in the blood of scarlet fever, and syphilis, and in the pus from gonorrhea and soft chancre.

All of which observations prove rather too much for the germ theorist, and too little to sustain the author's views of specific medication.

Again, the experiment of Semmer, of Dorpat, quoted by Dr. Nichols, "in which true charbon was produced in a colt by the injection into its jugular veins of water containing bacterids and monococcus cells from an animal with charbon," proves "only this, and nothing more," that charbon is communicable by inoculation.

We will not attempt to follow the author farther through the fascinating field of microscopic investigation in the cultivation of the "germ theory," which he has evidently studied with care and diligence, having said enough, we think, to show its insufficiency to cover the multiple and varied conditions constituting disease, and *ex necessitate* the inefficiency of germ-destroying specifics to rectify those conditions.

In contemplating with our author the brilliant physiological discoveries of Hall, Sequard, Bernard and others, with no desire to depreciate their value, we assert that they are only factors, important factors indeed, in the problem of disease, but isolated, and valueless to the practitioner until associated with the other and varied elements which must be taken into consideration in estimating the sum total of any, even the simplest, morbid process.

Admitting that ergot of rye has the power of exciting contraction in the involuntary or unstriped muscular fibres of the uterus, etc., of what value is this knowledge, isolated from any other, for it is in this relation that the author asserts its value, for when do we ever meet a case of disease in which spasm of unstriped muscle is the only pathological factor?

Again, what practical value is it to know that "bromid of

potass. is a vascular sedative, repressing local congestions of the brain and other organs," unless we know the causes (perhaps irritation of the pelvic viscera) of those congestions, and can remove them?

To some of his physiology we must demur slightly, however, *i. e.*, digitalis certainly increases cardiac action, but *does not* increase arterial tension. To stimulate the action of the heart, and of the arteries at the same time, would be to energize two antagonizing forces, which would neutralize each other, or destroy the mechanism.

Again, we cannot understand how atropia by "contracting the muscular fibres of arteries, stimulating the flow of blood in organs, can assist their functions and even produce active congestion." By contracting the calibre of arteries, the amount of blood conveyed to organs must be diminished, while the rapidity of its flow may be increased, cardiac force remaining unchanged. Moreover, practically, atropia *does not* produce active congestion, but, by contracting the calibre of the peripheral vessels, sends the blood back to the central organ, and if the heart be excited by too great repletion, there results an energetic reflex action which dilates the capillary vessels and restores vascular equilibrium, temporarily disturbed by the atropia.

These specific effects of drugs are exceedingly valuable, as they constitute the single letters of the alphabet of the science of therapeutics, by whose combinations we hope eventually to construct a language, in which we may learn truths of a broader significance than that this or that drug "is good for" this or that symptom.

At the beginning of his address, and after having attempted to define a negation, *i. e.*, that which *is not* rational medicine, the author thinks that which *is* is "well enough defined" by the following "extract from Dr. Gibson's address on Medicine before the British Medical Association, in August, 1870, quoted by an admirer in the *Boston Medical and Surgical Journal*, of the following month."

"Diseases have," he says, "so to speak, a lifetime of their own, with its periods of growth, maturity and decline. They are the passing tenants of the body which they occupy often with great injury for a limited time. Treatment cannot change their nature, cannot expel them at once, cannot quench them, cannot materially

shorten or prolong their existence." Against which definition we beg leave, in behalf of rational medicine, to protest. In order to properly define rational medicine, it is necessary first to appreciate its object and aim, which is undoubtedly identical with his own, *i. e.*, the prevention and cure of disease; and in order to define disease, it is necessary to understand its relative term, health.

Health is not an entity, but a condition of an entity, a condition characterized by perfect integrity of structure, and equilibrium of function. Any disturbance of this condition, in whatever direction, effectually destroys it, substituting therefor another condition, which is not health, it is dis-ease—ease disturbed.

Now, when we come to consider man in his threefold nature, *i. e.*, mental, moral and physical, and the complex relations which through these media he must hold with all that is outside of himself, and the still more complex correlations of that threefold nature within itself; when it is recognized that the most, apparently, trivial change in any one of these relations may be sufficient to destroy the organism; when we know that the addition of five per cent. to the amount of carbonic acid gas in the atmosphere is sufficient to produce fatal asphyxia; that a violent fit of anger may occasion apoplexy; that the over indulgence of some passion or emotion, good or bad, may result in insanity, or incurable cerebral disease; our view of the causes and phenomena of disease is extended infinitely, and we begin to appreciate the object and aim of rational medicine, and to lose confidence in our ability to unravel these complications with the assistance of drugs alone. When the overworked student comes to us, from his gloomy, ill-ventilated room, with head-ache, disordered digestion, and inability to sleep, shall we give him atropia, because it contracts the muscular fibres of arteries and diminishes the circulation in the brain, and tonics, to improve his appetite? or shall we give him these to remove the consequences of his violation of the laws of life, and at the same time give him fresh air, freedom from care and mental labor, exercise, and simple food—which course, alone, will the more rapidly restore health to that overworked brain?

To the wretched little victim of cholera infantum, breathing the foul air of a crowded tenant house, in a filthy alley, scantily fed on milk from a swill-fed cow, or a whisky-fed mother, which will

soonest restore health, antiseptics, or pure milk and the air of the country or the sea-shore?

Moreover, we assert that the causes of disease are not always direct, immediate, nor simple. In considering the human organism as perverted in disease, we have not before us the simple elements of a type perverted, a special direction, and a specific agent. This were indeed a simple problem for solution, and medicine would be a purely practical art.

But when, as is really the case, the perversion which attracts our attention may be simply "the last straw which has broken the camel's back," the last one of a series of concurrent causes, accumulated during a long time preceding, perhaps a lifetime, perhaps generations, by the agency of hereditary proclivities, personal characteristics, habits and modes of life, occupations, climate and local influences, the problem becomes more complicated, more general, and defies solution by specifics.

Rational medicine proposes to consider disease and its victims in these comprehensive relations, and for its justification can point to the diminished mortality, under any and all forms of disease, to the vastly increased average longevity in communities where it has been the governing influence, and also to the very advances in special departments of knowledge, with which our learned author seems so familiar, which have been made in obedience to the comprehensive demands of rational medicine, to fill some constantly recurring want in her grand scheme of science. W. H.

Report of Committee on Otology of Illinois State Medical Society. By
SAM'L J. JONES, M.D., Chicago,

Is confined chiefly to the progress made, more especially during the past year, in diagnosis and treatment of some of the more frequent diseases of the year. Refers to the use of the tuning-fork in determining the condition of the Eustachian Tube, and its mode of application; to chronic catarrh of the middle ear, and the mode of cleansing the middle ear by syringing the same through an incision in the meatus toward the Eustachian Tube and nares, by inclining the head. Considers also suppuration in the mastoid cells, "infantile otitis," and the relations thereto of the parasite *asperquillus glaucus*.

Referring to the use of electricity in the treatment of aural disease, the committee prefers (very wisely) to suspend judgment until further investigation shall have determined more distinctly the laws of its action.

We are inclined to think that the estimate of Troltsch, which appears to be approved by the committee, of the number of persons suffering from diseased hearing, as two out of every three, to be greatly exaggerated. However true it may be in Germany, it can scarcely apply to America.

The report concludes with valuable practical hints upon illumination of the ear, upon its auscultation, and upon the greater value of the information to be acquired by inspection of the living membrana tympani, than of the dead.

The report is brief, succinct and comprehensive, and constitutes a valuable addition to the very meagre literature of otology in America—qualities which might be imitated with advantage by writers of "Reports" generally.

W. H.

The Introductory Lecture to the course on Pathological Anatomy at the University of Pennsylvania. Delivered, September 4, 1871, by JOSEPH G. RICHARDSON, M.D., Lecturer on Morbid Anatomy in the University of Pennsylvania, Microscopist to the Pennsylvania Hospital, etc. Reprinted from the *Philadelphia Medical Times*.

Comes from the pen of one of the most industrious workers, and original thinkers in the ranks of young physic—a staunch defender of the doctrine of "rational medicine," in opposition to the specificists.

The lecturer impresses in a very happy manner upon the minds of his auditors the importance of pathological knowledge to enable them to become accurate diagnosticians, and hence, successful practitioners, and then proceeds to give some original views which we will refer to later.

His definition of life is better than that of Herbert Spencer, whom he quotes, and whose circumlocutions are so vague as to lack almost entirely the characteristics of definitions. It is gratifying to perceive the lecturer's total rejection of the theory of morbid entities, in his definition of disease, as the condition of "abnormal relations," the index to which is pain.

Will not some philosophical pathologist give us a definition of Pain? It would certainly throw much light upon the whole subject of disease.

In regard to the development theory, the lecturer's position appears to be not very clearly defined. While asserting it to be utterly devoid of absolute proof, "as applied to the far distant epochs of all pre-historic times," he yet admits, that "in its limited application to minor variations, it accords remarkably with the events of our own era, daily transpiring before our eyes." Here is a palpable inconsistency. That which is true must be so absolutely, invariably and continually; if the possibility of specific evolution be admitted now, it must be admitted for all past and future time.

While the occurrence of variations in organisms under the operation of modifying external relations, is a fact demonstrated by the daily observation of all, the permanency of any of these varieties under any and all conditions is yet to be exemplified. Indeed, one of the strongest arguments against the development hypothesis is, the reversion of varieties to the original specific type, upon the withdrawal of external influences. That organisms, whether of the human, or of a more humble type, have, within the compass of our observation, reached a higher degree of perfection than they had previously manifested, is no evidence of the truth of the evolution theory, so called, but rather of the emergence of the true type into an actuality which previously existed potentially in the organism, though repressed in its manifestation by unfavorable conditions. For example, in the new-born infant, the man exists potentially, awaiting only time and favorable conditions for his evolution: there is no specific change—no development from a lower to a higher specific grade. So, also, many other organisms are found in an undeveloped condition, which, when more favorably surrounded, reach gradually the full measure of specific perfection of their own type.

In considering the law of heredity, in its relation to disease, the author perceives a constant tendency to degeneration, as a counter movement to that variation towards a higher and more perfect type, which constitutes the datum of the development theory; this tendency to degeneration he has formulated under the expression "The extinction of the unfit," and in this formula suggests the

key to the various "problems of hereditary disease amongst which our life-work is cast."

From the operation of the law thus formulated, the lecturer deduces the cause of the superior health of brutes, as compared with ourselves; the "unfit" among them being rapidly extinguished, while science, as applied in medicine and collateral arts, struggles to counteract this tendency, and to perpetuate the unfit. This is undoubtedly true, and yet, at the same time, there is another end accomplished, the extinction of the unfit by the restoration of the type, which must not be lost sight of. The very existence of the data necessitating, or even justifying, the conclusion expressed in the author's formula, involves another conclusion also—that there is a limit to the possible perversions of specific type, beyond which the organism becomes unfit to represent the type, and, hence, is extinguished. This law of limitation, which is simply another mode of expressing the author's formula, "the extinction of the unfit," is that under the operation of which the type in all organized beings is preserved, and furnishes in its results one of the strongest arguments against the evolution hypothesis.

Just as varieties, when exempted from the influence of the conditions under which they originated, invariably revert to their original specific type, so morbid varieties are likewise short lived, and either revert to the normal standard, or perish.

The author's hypothesis of "*the inheritance of microscopic peculiarities of formation*," seems to be a necessary constituent of the law of heredity. As peculiarities of feature are undoubtedly transmitted to succeeding generations, so must peculiarities of cell growth and arrangement, which are only the ultimate anatomical factors of these features; but these are simply varieties originating in the influence of temporary conditions, and are extinguished so soon as the influence of these conditions is withdrawn.

We are glad to direct the attention of our readers to this little pamphlet, not only on account of the value of the specific propositions advanced therein, but as a general exponent of the doctrines of the school of "rational medicine par excellence" (to quote the sarcasm of a recent essayist). This author is not satisfied to "feel sure that" "Cod Liver Oil is good for consumption," but thinks

that he will not forfeit his position as a *practical physician* if he should occasionally overlook the drug shop, and prescribe for his patient "nourishing food, pure air, carefully regulated exercise," pulmonary gymnastics, and protection from catarrhal attacks. And so think we. W. H.

Medical Education in America: being the Annual Address read before the Massachusetts Medical Society, June 7, 1871, by HENRY J. BIGELOW, Professor of Surgery in Harvard University. Cambridge: Welch, Bigelow, and Company, University Press. 1871.

The very high reputation achieved by the author of this Essay had induced us to look forward to its perusal with the greatest pleasure. We must confess, however, to have been somewhat disappointed at the disposition manifested in many of its expressions to alienate scientific medicine from medicine as an art, and to lose sight almost entirely of the fact that art, in whatever department of human effort, is simply and solely the superstructure upon the foundation of science. Therefore the broader and deeper the scientific foundation, the grander and more extensive the possible superstructure. Beginning by deprecating the danger of distracting the student's mind "from what is practical, useful, or even essential, by the well-meant enthusiasm of the votaries of less applicable sciences," he proceeds to inculcate as the dominant idea in his address "Utility in Medical Education." The assertion of such a proposition would seem to be superfluous, as it is hardly to be supposed that any one could pursue the study of medicine without the stimulus of such an aspiration.

The deprecation of extensive scientific culture appears to be entirely unnecessary in this essentially utilitarian age, in which short-cuts and by-ways appear to be the most popular roads to knowledge, or, rather, to its results.

Again, while it may be "fair to inveigh against quackery," it is not fair in the author to attempt to condemn as enthusiasm that which is opposed to quackery.

Should the author condemn his Parisian professor for lecturing upon the Plague because, as it could never in all probability plant its grim standard upon Boston common, a knowledge of its pathology and therapeutics would be of no utility to him? Is it not

possible that among the hundreds who listened to that lecturer in Paris there might be some Oriental, whose native land was ravaged by this fell destroyer; or even some adventurous Frenchman, who purposed to utilize his scientific studies to the saving of human life in Smyrna or Aleppo, or some other plague-stricken spot of earth? Such a chance has happened to at least one American student. But our author admits that "there is a limit to this line of argument." "No student or artisan," he says, "is the worse for an outlook upon kindred arts and sciences which will help him to establish the true relations of his own, which will supply him with additional facilities and light for its pursuit, and with that training of his intellectual powers afforded by a systematic variation in their exercise."

In this admission had the author, instead of saying "no student" is the worse, said, every student is the better, he would have conceded all that the most zealous advocates of a comprehensive scientific medical education demand.

We must protest against the author's classification of the profession, into "those who are to do the daily work of medical attendance only, and those who may be expected to contribute something to the development of medical knowledge," "for each of whom a course of education is to be provided, such as will not rise above the proper requirements of the one nor fall below the just expectations of the other." Does he mean to degrade one class into mere hewers of medical wood and drawers of medical water; into mere nurses, who shall receive from the other class their contributions to medical knowledge to be utilized for the benefit of their patients? But how, we would ask, has medical knowledge been developed in the past, but by the generalization of data collected "in the daily work of medical attendance" by this very class which the author seeks to make the very Pariahs of the profession? If these then be deprived of that "training of their intellectual powers," which will make them careful observers and accurate thinkers, how are these data to be acquired, and how can those contributions to medical knowledge be made by this high caste class in the absence of material out of which they may be elaborated? He would demand from one, scientific development without data; from the other, utility in practical art without scientific principles. Further, the author holds "that, as

a rule, outside of surgery and other surface work, it is the disease that turns for better or for worse, and not the physician that turns it," from which the inference is easy that he is disposed to look down from the surgical eminence which he has so justly attained, with somewhat too much of contempt upon those whose labors though perhaps less appreciable to the vulgar eye, are none the less demonstrable and positive in their results. "The balance of healthy function is disturbed; for a varying time the disturbance increases, and for another varying time it diminishes, until the balance is restored." Did the author ever see a case of ulceration and perforation of the intestine resulting in acute peritonitis, in which the patient was saved by controlling absolutely all peristaltic intestinal action until adhesion had occurred? If so, was it the "beast or the driver" that turned out? Will he assert that the duration and mortality of typhoid fever has not been materially diminished within the past twenty years by means of treatment deduced from a more accurate knowledge of its pathology?

How is every practitioner to attain that accurate and well defined knowledge of undisputed therapeutic principles and details, which the author would exact, without a thorough and comprehensive scientific medical education which he would deny him?

"He should know how to treat and of course to identify all common diseases and injuries so that health should be re-established, etc." Would it not be better, we ask, to so instruct the student in scientific principles which underlie all disease, that he should be able to identify "not by *name* perhaps," but by classification under pathological law, both "common" and uncommon "diseases"? When he has provided "fifty of these plain and competent men," he will find it difficult to provide "one who knows more."

"Whatever else it may or may not do, a medical school should aim, first, to give a plain, sound, solid education, without error if without ornament." Granted, but is this amount of acquisition possible to a student ignorant of his own mother tongue, and of the principles of general physics and chemistry? and we can point out to him many such diplomats of schools as prominent as his own.

Again, says our author, "the best practitioner is the man of soundest judgment," an aphorism we cannot gainsay; and further, with good judgment, added to industry and fair ability, you can make an excellent medical practitioner out of moderate medical

acquirement, provided only it be of the right sort. What sort of a practitioner would you make with all these and the highest amount of medical acquirement possible?

— "A little learning is a dangerous thing, etc." It is certainly unfair for the author to assume, as he appears to do, that judgment and scientific acquirement must necessarily be in inverse ratio to each other. Cannot a learned man have good judgment? Is it not reasonable to suppose, other things being equal, that the man of learning will have better judgment than the comparatively ignorant man? If this be not true, then why study at all? why not leave the whole field of medical practice to the "natural bone-setters," *et id omne genus*, who, despising book learning, rely upon judgment as their sole stock in trade?

While it is not necessary generally, in order to be a successful practitioner, to be "acquainted with every theory of fever," to "analyze" the patient "for urea," to "register him with the sphygmograph," "keep a thermometer under his armpit;" or "generate ozone in his apartment;" but we will venture to say: that the man who understands, who knows how to do all these, will in the majority of cases be the better practitioner: if not, then we should throw science where Macbeth would "throw physick"—"to the dogs."

In regard to the distinguished foreign practitioner who treated the case of diphtheria with small doses of *copaiba*, we cannot agree with the author that he "lacked judgment," he lacked knowledge or moral principle, or both. A little more learning would not "have displaced the landmarks of his judgment," but rather strengthened them.

Still later; says our author these remarks are not intended as a plea for mediocrity. Whatever his intention may be, they have that appearance, to the reader unacquainted with the author's professional life, which by its brilliancy certainly falsifies the tendency of this essay. And moreover they will be assumed as such a plea by half the ignoramuses in the land who affect to see better in their own professional twilight than others in the full daylight of scientific truth.

From the succeeding pages in which the writer indicates some of the subjects which should more especially occupy the student's attention, and from the accuracy and extent of the information

which he demands upon those subjects, we are inclined to think that the author does not practice what he preaches. We feel sure that the following cannot illustrate either his practice or that of any honorable, conscientious physician, viz.: "The matter of prescribing in every day practice stands thus: First, does the disease, on any ground, require a prescription? Second, does the patient? If the former, let the prescription convey, with the word, the blow; but if you prescribe for the patient, and not for the disease, the prescription, then an empty word, a vox, if need be, should convey also a preterea nihil of undoubted innocence."

Again, we have never had the good fortune to see one of our accomplished author's prescriptions, but we cannot believe that "such Latin and English names as are unmistakable" are therein "promiscuously intermingled as vernacular, without regard to case as if the whole were Anglicized." And yet such are his aspirations for his students. The frequent reference which the author makes to the "limited time of the student of medicine," would permit the inference that his period of study must necessarily terminate with that of his pupilage, instead of what is most frequently true, that this marks the beginning of his intelligent study. It is very true that "In this country the question is, What is the most profitable investment of time, capital and labor?—and in answer we say that he who wishes to extract the most *money profit* out of his time, capital and labor, had better leave the study of medicine to others, and devote himself to trade or the mechanical arts, which are pecuniarily infinitely more profitable.

The author would exact from his student accurate knowledge in Anatomy, Physiology and Therapeutics, and yet revolts in disgust at the "Horrors of Vivisection," whose "recorded phenomena, stored away by the physiological inquisitor on dusty shelves, are mostly of as little present value to man, as the knowledge of a new comet, or of Tungstate of Zirconium." We confess our astronomical and chemical deficiencies to such an extent as to render us unable to appreciate the value of the latter, but we have ever been under the impression that, to Magendie and Marshall Hall, Alcock, Prochaska, Romberg, Muller, to Claude Bernard, and Brown Sequard and many others, vivisectors, we owe all that is valuable in modern physiology, or what is the same thing, in physiology—and what is there of medical science, or of medical art, that is not

based upon these very physiological laws, discovered, and discovered only, by vivisection?

There are some curious inconsistencies in this pamphlet, the most striking of which is the following, which we quote as indicating ideas so totally different from the spirit of the rest of the volume, that we cannot help suspecting them to be the real ideas of the author, which he has unconsciously inadvertently allowed to escape him. "Let us have liberal education in its widest sense, the highest education possible to the whole mind, and the whole body of the largest number, everywhere—but then let us begin at the beginning, and teach the child, and not at the end;" to all of which we say most heartily, Amen.

In the portion of the address in which the machinery of education is discussed, he gives a most graphic sketch of the American Medical Association; its pretensions, its powers, and its transactions. He is evidently familiar with the subject; so familiar, that he must have been "one of them."

With regard to the relative advantages of the German or University system of education, and our own or what might be called the free college system, it would be difficult to form any comparison without taking into consideration the wide differences in the spirit and the characteristic of the people of the two nationalities. Without considering these we can only judge by the aggregate results, and so far as statistics are of any value in the account, they must be considered as indicating the practical superiority of our own over the average European practitioner. As specialists they undoubtedly excel us; as general practitioners, the balance, we believe, turns the other way.

It is gratifying, truly, to know the rapid progress which the German school has been making of late toward accuracy of thought, and experiment and vigor of deduction, and there is doubtless room for still further progress in the same direction, which we trust will be speedily realized.

And it is still more gratifying to read the author's mode of killing Huxley's protoplasm, and with it its materialistic basis.

His review of the medical department of the German University is exceedingly interesting, and will well repay for its perusal one not already familiar with its machinery. It can scarcely be disputed, however, that the boasted superiority of the German

graduate over our own, is due very much more to the greater length of time devoted to study, than to any intrinsic superiority in the mode or form of teaching.

Should the present three years' term of our American Colleges be increased, as in them, to five, and a higher standard of preliminary education exacted, the result could scarcely be other than an elevation of the profession in every desirable respect, but we fail to see how that is to be attained by simply re-arranging the subjects of study, all of which are still to be comprehended within the term of three years.

W. H.

Cholera Infantum.

One of the best, if not the very best, article upon this all important subject we have ever met, is contained in the September No. of the St. Louis Medical and Surgical Journal from the pen of our accomplished friend, Dr. William S. Edgar, of St. Louis. The article is comprehensive and at the same time concise.

Disregarding the ordinarily assumed causes of the disease, he decidedly attributes the efficient agency in the production of this malady to heat. The meteorological statistics of various European and American cities are cited comparatively with the Mortality Reports, and when collated seem to demonstrate as true, that if long continued and intense heat be not the sole, it is at least an essential factor in the concurrent causes of cholera infantum.

The author's views upon the injurious effects of a diet consisting exclusively or largely of impure milk—and under this head he includes not only that of swill-fed, but also of stall-fed cows—are most just, and deserve to be widely disseminated, and thoroughly impressed upon the minds of the profession and the public as well.

That milk may contain deleterious elements which are entirely unappreciable by any of the ordinary scientific tests, we have been long convinced; and, moreover, that nothing would contribute so largely to the reduction of infant mortality in large cities, as such municipal regulations as would positively prohibit the sale of such poisons, and secure proper food for infants.

Dr. Edgar's article includes his views of the ætiology, pathology, therapeutics and hygiene of the disease, which, as he justly remarks, destroys thousands of children annually in our large

cities. It is undoubtedly more fatal in the aggregate mortality of series of years than Asiatic cholera, and yet while using every precaution to prevent the spread of the latter, we are singularly apathetic regarding the former and greater danger. W. H.

PAMPHLETS RECEIVED.

A Review of Darwin's Theory of the Origin and Development of Man. By JAMES B. HUNTER, M.D. Reprinted from the Journal of Psychological Medicine, July, 1871. New York: D. Appleton & Company. 1871.

Braithwaite's Retrospect of Practical Medicine and Surgery. Part LXIII. July. Uniform American Edition. New York: W. A. Townsend, publisher. 1871. \$2.50 a year. Half-yearly parts, \$1.50.

The Half-Yearly Abstract of the Medical Sciences, etc., etc. Vol. LIII. July, 1871. Philadelphia: Henry C. Lea. 1871. \$2.50 a year. Single volume, \$1.50.

Transactions of the American Ophthalmological Society. Eighth Annual Meeting. Newport. July, 1871.

Transactions of the Medical Society of the State of West Virginia. Instituted April 10th, 1867.

The Physicians' Annual for 1872. A Complete Calendar for the City and Country Practitioner. Pp. 82. Philadelphia: S. W. Butler, M.D. 1872.

Report of Surgical Cases in the Army. Circular No. 3. Surgeon-General's Office. Washington, Aug. 17, 1871.

First Biennial Report of the Board of State Commissioners of Public Charities of the State of Illinois.

Transactions of the Second Annual Session of the Medical Society of Virginia. 1871.

Spectrum Analysis: Three Lectures by Professors Roscoe, Huggins, and Lockyer. No. 7. University Series. New Haven, Conn.: Charles C. Chatfield & Co. 1872.

Addresses at the Inauguration of Allen R. Benton, as Chancellor of the University of Nebraska. Sept. 6th, 1871.

The Old Franklin Almanac for 1872.

Transactions of the Medical Society of the State of Pennsylvania, at its Twenty-Second Annual Session. Sixth Series. Part II.

Remarks upon the Diagnosis of Ovarian Tumors—From Fibrocystic Tumors of the Uterus. By CHARLES C. LEE, M.D., Surgeon to the Charity Hospital, etc.

On Chronic Hypertrophy of the Lips. By R. W. TAYLOR, M.D., Surgeon to the New York Dispensary Department of Venereal and Skin Diseases.

Vick's Illustrated Catalogue and Floral Guide for 1872. JAMES VICK, Rochester, N. Y. Profusely Illustrated. Pp. 120.

L'Union Medicale Du Canada. Revue Medico-Chirurgicale paraissant tous le mois. Redacteur: J. P. Rottot, M.D. Assistant Redacteurs: A. Dagenals, M.D., L. J. P. Desrosiers, M.D., Montreal. Janvier, 1872. Vol. I, No. 1. \$3 par annee.

Industrial Monthly. A Practical Journal for Manufacturers, Mechanics, Builders, Inventors, Engineers, and Architects. With a Record of Railway Progress. Vol. I, No. 1. 1872. \$1.50 a year. Single Nos. 15 cts. Issued by the Industrial Publication Company, 176 Broadway, N. Y.

New Remedies. A Quarterly Retrospect of Therapeutics, Pharmacy, and Allied Subjects. Edited by HORATIO C. WOOD, JR., M.D., Professor of Medical Botany, University of Pennsylvania, Physician to the Philadelphia Hospital, etc., etc. New York: Wm. Wood & Company, publishers. \$2 per annum.

We have become somewhat tired of noticing new journals, which come to us long enough to get a notice and a place on our exchange list and then die out. But from the well known character of the publishers and ability of the editor, we are inclined to believe this new candidate for professional favor will meet with better fortune. The initial No. promises well.

The Kansas Magazine. Vol. I, No. 1. January, 1872.

This is a new secular monthly got up in about the style of the Atlantic, and well filled with original and excellent reading matter. \$4 a year. Single copies, 35 cts. Address Kansas Magazine Publishing Co., Topeka, Kas.

Editorial.***Rush Medical College.***

The Twenty-Ninth Annual Session of Rush Medical College opened on the 27th ult. The usual introductory exercises took place in the lower lecture room of the college, in the evening, and the regular course of lectures commenced the next morning at nine o'clock. Prof. H. M. Lyman pronounced the Introductory Lecture, which we shall give our readers, by his permission, in the next number of the JOURNAL, and therefore shall not anticipate opinions by eulogizing it.

Professor Freer, again returned from his annual European trip, and we are happy to say in splendid health and spirits, gave the first regular lecture of the course, and was followed by each member of the Faculty in the order of the printed programme.

The only changes we have to note are the retirement of Prof. E. Ingals from the active duties of the chair of *Materia Medica* and Medical Jurisprudence, his appointment by the Board of Trustees to the Emeritus Professorship of the same branches, and the election and installation of J. H. Etheridge, M.D., an alumnus of the college, in the vacated position. The Board of Trustees accompanied their election of Prof. Ingals to the Emeritus Professorship by a warm expression of their high sense of the ability with which he had discharged the duties of his collegiate position, their profound respect for his personal character, and best wishes for his future prosperity and happiness.

Prof. Etheridge, the new incumbent, advances to the position with the prestige of thorough scholarship, the diploma of Rush, foreign travel and study, considerable experience as a lecturer, personal culture and refinement, and the absolute knowledge on the part of the individual members of the Faculty of his eminent qualifications for the chair.

The senior editor of this JOURNAL is happy to announce that WALTER HAY, M.D., his associate, has kindly consented to deliver, in connection with the course on Practical Medicine, a series of lectures on the Pathology and Therapeutics of the Brain and Nervous System. Due notice will be given of the time when

these lectures will occur, and the senior editor takes the liberty, hereby, of inviting the profession to attend them at their convenience, and he does not hesitate to say they will find themselves amply repaid for the time occupied.

The class assembled is the largest which has been present at the opening of the course for several years.

Surrounded as the college is by a cordon of competing schools, the most of which throw open their doors "without money and without price," the Faculty had every reason to anticipate a considerable falling off in attendance the present session, and are in fact surprised, and of course gratified, at the large attendance. The great book-house of W. B. Keen, Cooke & Co. (our publishers) inform us that their sales of medical books surpass those at the opening of any previous session.

The senior editor congratulates the friends of "Old Rush" on its flattering condition and prospects, and attributes them mainly to its teachings of sound doctrine—of physiological medicine, surgery and obstetrics—conservative in all branches.

Calamity.

The foregoing paragraphs were written for the October No. of the JOURNAL. That No. was delayed a few days for the purpose of announcing the initial exercises of Rush Medical College. The edition was bound and ready to mail to subscribers. The reason why it was not mailed is known to all the world.

There was a fire in Chicago, on Sunday night and Monday morning, Oct. 8th and 9th.

That fire burned over an area in the city of 2,124 acres.

It burned 17,450 buildings, and besides public and business edifices, it consumed the homes of 98,500 people. \$300,000,000 were destroyed in a few hours.

Writers of all varieties have exhausted language in description of this supreme catastrophe. The secular prints have been full of it—books have been written about it. We have no words for anything more than the simple facts, above given, and the plain statement that in the holocaust the immense establishment of our Publishers, Messrs. W. B. Keen, Cooke & Co., was totally destroyed. With it went the mail book of the JOURNAL, and the back Nos. for the last two years. Compared with the destruction of their vast

stock of books and stationery, this was a comparatively trivial loss, but it was an exceedingly serious one to the JOURNAL itself.

Messrs. Rand, McNally & Co., Printers of the JOURNAL, were equally unfortunate. They were perhaps the leading house of the Northwest, and the array of their presses, machinery, and supplies of every sort, was utterly bewildering to everybody, except printers of the largest experience. They saved not a pound of type, not a press, a hammer, or a sheet of paper.

As before stated, the October No. of the JOURNAL was burned with the rest of their stock. Not a single No. was saved. Accidentally, one of the workmen had wrapped a photograph in the proof sheet of the form which contained the editorial above. The photograph and its wrapper were in Ohio, and when the proof sheet came back to us, long after the fire, it looked to us literally like "a brand plucked from the burning."

With characteristic energy, Messrs. Keen & Cooke not only made immediate arrangements for re-establishing their general business, but also for the continuance of the JOURNAL. We had hoped for a delay not beyond a month at the latest. But circumstances which we could not foresee prevented. Our Printers have nearly reorganized their immense establishment, but, in consequence of the non-reception of material, which had to be manufactured to order, delay has been inevitable. If we had anticipated this, we should have sent the JOURNAL elsewhere, for temporary printing.

We give you here a consolidated No. It may be called a Fire Number, if desired.

Being now supplied with the usual facilities, subsequent Nos. of the JOURNAL will be issued regularly, as in the time before the fire.

RUSH MEDICAL COLLEGE

Lost its building, and everything it contained. Not a scrap of paper, a bit of apparatus, a book or a bone, was left. Prof. Lyman, from the top of a building, several miles away, saw, through a telescope, the massive self-sustaining roof fall, with a grand rush of flame heavenward succeeding, and was thus the last man to look upon the erect building, and probably the only one who saw it burn, for, while it was being consumed, around for blocks, (we were about to write for miles) there was but a roaring sea—a hell of flame.

Profs. Freer, Blaney, Powell, Holmes, had their homes and offices and other property utterly burned up. Prof. Gunn lost his library, instruments, office furniture, etc. Prof. Rea lost his office, and a large sum in buildings, etc. Drs. Parkes and Wadsworth also lost everything. But space and time prevent details. In another place, in the JOURNAL, will be found an appeal to the profession on behalf of the College, by the Alumni, with a paper, also, from the Board of Trustees, to each of which the earnest attention of readers is solicited.

After an interim of *four* days, only, the lecture course was resumed, and has since been in regular progress. The authorities of Cook County Hospital kindly granted the use of the amphitheatre of their building, for the remainder of the session.

It is gratifying to state that, although nearly every one of the students was burned out, and some lost their all, yet a majority of the class returned to continue their attendance. We do not hesitate to say that, notwithstanding everything, the session thus far has proved pleasant and useful to all concerned.

Many of the Medical Colleges throughout the country tendered free tickets to all students who paid for them here—the Chicago Medical College being the first to make the offer. For this generosity they are entitled to the thanks of Rush Medical College. May they be spared an opportunity of our reciprocating the courtesy.

The rebuilding of the College, of course, is determined upon. It will be finished for occupancy before the next session.

St. Luke's Hospital.

M. O. Heydock, M.D., has been appointed by the Board of Trustees of St. Luke's Hospital, Attending Physician, and I. N. Danforth, M.D., Pathologist.

The American Practitioner

Lays us under renewed obligations by sending the two volumes of their issue for 1871, beautifully bound. It is a very valuable periodical, and we cheerfully commend it to our own subscribers, who wish (and who does not?) to take more than one journal. Address the Publishers, Louisville, Ky., and enclose \$3.00.

Bromo-Chloralum.

This is a very efficient antiseptic, disinfectant, and deodorizer. It possesses the decided advantage of being in itself inodorous and nearly devoid of irritant properties, when locally applied. The writer has used it in many instances as a substitute for solutions of carbolic acid, with very pleasant results. It is not anæsthetic or sedative, like the latter, in its local application, and hence, in many instances, is preferable. We consider it a valuable addition to our medical armamentarium.

Diaries.

Our thanks are due to S. W. Butler, M.D., Editor of the Philadelphia Reporter, for a copy of his very excellent "*Physician's Daily Pocket Record*," comprising a Visiting, many useful Memoranda Tables, etc. This book is suitable for any year, and in some particulars is the most convenient issued.

Lindsay & Blakiston issue their diary for 1872 in the form now well known by the profession, it having been many years the same.

A Query to the Board of Health.

Some of your employes take pains to urge the inmates of houses where small pox is present to wear bags of camphor and assafoetida as preventative. Is this by official order?

CHICAGO, November 1st, 1871.

To Whom it May Concern :

This is to certify, that the resident Alumni of Rush Medical College, of the City of Chicago, at a meeting held at the house of E. Ingals, M.D., on the eve of October 17, 1871, appointed the following Alumni an Executive Committee, to draft and present an appeal to the Alumni and friends of the College, for aid to rebuild and refurnish the College Building, viz : T. D. Fitch, M.D., Chairman; H. A. Johnson, M.D., V. L. Hurlbut, M.D., C. T. Parkes, M.D., Ben C. Miller, M.D., and F. A. Emmons, M.D.

E. INGALS, M.D., *Chairman.*

CURTIS T. FENN, M.D., *Secretary.*

AN APPEAL.

To the Alumni and Friends of the Rush Medical College, recently destroyed by fire, for aid to assist in its rebuilding.

This College is among the oldest institutions of learning in the Northwest, having been in operation since 1843, at which time the region now tributary to Chicago was but sparsely populated, and had little wealth. During this time it has supplied a pressing need of this new country. It has educated a large number of young men, who are scattered through our whole country, worthily filling places of great usefulness and responsibility; and for this, both themselves and the public are indebted, in a great measure, to the school in which they received their instruction. A large proportion of its students have been possessed of little, save youth, hope, intelligence, and determination. Many of these, having been generously aided by the College, have taken rank among the most substantial members of the profession. The Faculty at all times, since its organization, has been moved by an earnest desire to promote the best interests of the profession and the College. For this its members have labored faithfully and earnestly; they have met the pecuniary burden of the School from its first foundation, and four years since they erected from their own resources, at an expense of \$70,000, the most ample and best appointed college building on this continent, and filled it with every necessary appliance for successful teaching, and the influence and usefulness of the School has steadily increased from year to year. But in a day, the College Building, with all its contents, was swept away, along with a large part of the city, in which it stood a peer among many other noble institutions of learning. The pecuniary loss of the Faculty, in the destruction of the College, is light when weighed against others they have sustained. A number have lost nearly everything, and all have suffered much. The College must be rebuilt. Its past history, its future promise for good, demand no less. Under the circumstances, it is unreasonable to expect the Faculty to do this unaided. The College is now in a condition to justify an appeal to its Alumni, and to society, for some return for the favors it has conferred upon both. There is, perhaps, no field of benevolence, that offers a richer return than to provide adequate and easy opportunities for instruc-

tion to those who desire to become learned in the best means for assuaging pain and healing the sick.

All donations may be remitted to Chas. T. Parkes, M.D., 462 Elston Av., Chicago, who has been elected treasurer for the fund. They will be thankfully acknowledged, and faithfully devoted to the rebuilding of the College.

MEETING AND ORGANIZATION OF THE COMMITTEE.

At an appointed meeting of the Executive Committee, held at Cook County Hospital, October 26th, 1871, all the members being present, Dr. T. D. Fitch in the Chair, the Committee organized by the election of the following officers: F. A. Emmons, M.D. Secretary, Ben C. Miller, M.D., Assistant Secretary, C. T. Parkes, M.D., Treasurer, who was required to give good and satisfactory bonds in the sum of thirty thousand (\$30,000) dollars, for the faithful performance of his trust, which bond has been furnished and duly accepted.

T. D. FITCH, M.D., *Chairman.*

F. A. EMMONS, M.D., *Secretary.*

The Trustees of Rush Medical College to its Alumni, Greeting :

The late terrible conflagration which devastated so large and fair a portion of Chicago, swept out of existence nearly all of the material part of your Alma Mater. Rush Medical College exists to-day only in its legal organization, the lot on which the College building stood, the energy of its Trustees and Faculty, and the love and fidelity of its Alumni.

The college edifice, so recently and expensively erected, the chemical and physiological laboratories, the museum, and all the appliances of teaching, are gone, and a sad material ruin replaces them.

The Trustees are, however, cheered and encouraged by the expressions of sympathy and offers of pecuniary assistance which have come to them from many of the Alumni, in different parts of the country. The Alumni in Chicago have appointed a committee to appeal to their brethren, in behalf of their Alma Mater. This appeal the Trustees most heartily approve and endorse; and while all sums which may be offered will be most thankfully received, they are confident that fortune has smiled upon very many of the sons of "Old Rush," and that among these favored ones there

are generous hearts, which will prompt to munificent donations. To such they make the following offer:

For every donation of five hundred dollars the Trustees will establish a perpetual free scholarship, which shall bear the name of the donor, and which shall be conspicuously emblazoned on the wall of the lecture room. A certificate of this scholarship, engrossed on parchment, will be issued to the donor; which certificate shall secure to the bearer, free tuition, and when found qualified, free graduation. This certificate shall be perpetual in its operation; and thus the donor will have endowed for one student each year a Free Medical College.

WM. B. OGDEN, *Chairman.*

GRANT GOODRICH, *Secretary.*

Light out of Darkness.

"To every cloud there is a silver lining," and the cloud of gloom which has overshadowed the charred embers of our once beautiful city, is no exception to the rule. Scarcely had the fire fiend arrested his destroying tread, and ere the smoke of the conflagration had subsided; when the tidings of our great calamity which rendered houseless and destitute so many of our professional brethren, in common with their fellow citizens, were flashed across the world, there came back to us, borne upon the wings of the lightning, cheering messages of aid from the members of our noble profession all over the land. The differences of Doctors have been proverbial. They differ now only in a noble emulation to excel each other in generosity to their suffering brothers.

The old proverb, "Three physicians, two atheists," must be altered in this our day, to "Three physicians, two philanthropists." The disaster which has befallen us has given our profession the opportunity to vindicate itself, and to demonstrate on a grand scale that philanthropic spirit which is the real characteristic of the true physician.

Never was there occasion more urgent for philanthropic zeal, and never was occasion more promptly seized, nor zeal more ardently manifested.

On the evening of the 8th of October, the great conflagration began, and continued its ravages until the afternoon of the 9th.

On the 11th, a stated meeting of the New York Pathological Society was held, at which it was—

Resolved, That the following communication be sent to the Physicians of Chicago:

To our Brethren in the Medical Profession of the City of Chicago:

Believing that in consequence of the recent calamitous fire many of you have suffered serious pecuniary losses, and fearing that some may be in actual want, we desire to be informed what aid we can render you.

We would be glad to inaugurate measures for the establishment of a relief-fund, and to appeal to the medical profession in this city, and throughout the country, in its behalf, provided you confirm its propriety and necessity.

It is perhaps needless to say that, while we would not stay the hand of charity extended to the suffering people of Chicago, without reference to class, this suggestion of relief is not intended for any except those whom we recognize as honorable and legitimate members of our profession.

(Signed) A. L. LOOMIS, M.D., *President*.

G. F. SHRADY, M.D., *Secretary, New York Pathological Society.*

A meeting of the members of the medical profession was called in St. Louis, which was called to order by Dr. Gregory, and of which Dr. Marshall was elected Chairman, and Dr. Hurd, Secretary.

Dr. Kinnard offered the following preamble and resolutions, which were adopted:

WHEREAS, many members of our profession, in common with the public at large, have already contributed liberally to the common charitable fund raised by the citizens of St. Louis for the Chicago sufferers; therefore, be it

Resolved, That our meeting to-night has been called together to enable the regular medical profession of St. Louis to act in concert in their efforts to aid such worthy medical men of Chicago as may have been rendered destitute by the late disastrous conflagration that laid waste so large a portion of that city.

Resolved, That we believe our object can be best accomplished by sending two delegates from the profession of St. Louis to that city, whose business it shall be to diligently inquire into the necessities of our brethren there, and to aid such as may be needy and deserving, as far as practicable, with the amount which may be placed in their hands for that purpose.

Resolved, That the committee, on its return, report the prospective needs of the destitute members of the profession in Chicago.

Dr. Hammer moved that a committee of two physicians from each ward be appointed to solicit subscriptions for the object in view.

The motion prevailed, and the following committees were appointed :

Carondelet—Drs. Starkloff and Outen.

First Ward—Drs. Reis and Hickman.

Second Ward—Drs. Fred. Hauck and Castelhuhn.

Third Ward—Drs. Green and Wall.

Fourth Ward—Drs. Porter and Borck.

Fifth Ward—Drs. Hammer and Mudd.

Sixth Ward—Drs. Gill and Bates.

Seventh Ward—Drs. Hill and Newman.

Eighth Ward—Drs. Heyer and Coleman.

Ninth Ward—Drs. Guhman and Hawley.

Tenth Ward—Drs. Baker and Rohlfing.

Eleventh Ward—Drs. Scott and Lingenfelder.

Twelfth Ward—Drs. Carrington and Strotholte.

Elleardville—Dr. Tyler.

Lowell—Dr. Ben Linton.

Cheered by these evidences of sympathy from our professional brethren, a large meeting of the members of the medical profession of Chicago was held at No. 797 Wabash Avenue, on Tuesday evening, October 17th, at which Dr. N. S. Davis was elected Chairman, and Dr. E. Andrews Secretary. At which meeting the above communications were read, as also the following telegraphic dispatch :

NEW YORK, Oct. 17, '71.

DR. H. A. JOHNSON,

Chairman of Sanitary Committee :

Over two thousand dollars subscribed by medical men this evening for suffering physicians of Chicago. Organize for its distribution, and draw on Dr. S. T. Hubbard, twenty-seven West Ninth st. Further amts. to be reported.

(Signed)

E. R. PEASLEE, M.D.,

Chairman.

Whereupon Drs. Moses Gunn, E. Andrews, and A. Fisher, having been appointed a committee to recommend suitable persons for a permanent Relief Committee of five, nominated the following gentlemen : Drs. De Laskie Miller, N. S. Davis, T. D. Fitch, Ernst Schmidt, and Walter Hay. Which nomination, having been unanimously confirmed, the following resolutions were adopted :

Resolved, That the Committee just chosen is hereby authorized to receive all donations for the relief of respectable physicians, who are sufferers by the late fire, distribute the same at their discretion, and render a strict account with vouchers, to any future meeting, which may be called by the chairman to consider the same.

Resolved, That this meeting tender the cordial and heartfelt thanks of the profession of this city, to their brethren in other and distant cities, for the prompt and liberal offers of assistance to the many among us who have lost, by the late terrible fire, not only their homes, clothes, books and instruments, but their practice, and pledge a just use of whatever is given.

On Wednesday, October 18th, the Committee having organized, issued a circular embodying the resolutions passed at the preceding general meeting, together with the following notice :

Contributions may be forwarded at once by Express, or Draft on New York, to Walter Hay, M.D., Secretary Medical Relief Committee, No. 384 Michigan Avenue.

Donations from Publishing Houses, Instrument Makers and Physicians, of Books, Instruments or Apparatus, will be gratefully received ; as many of our professional brethren have saved only their lives.

COMMITTEE.	{	DE LASKIE MILLER, M.D.,
		No. 518 Wabash Ave., <i>Chairman</i> .
		N. S. DAVIS, M.D.,
		No. 797 Wabash Ave., <i>Treasurer</i> .
		ERNST SCHMIDT, M.D.,
		No. 387 State Street.
		T. D. FITCH, M.D.,
		No. 296 West Monroe Street.
		WALTER HAY, M.D.,
		No. 384 Michigan Ave., <i>Secretary</i> .

On the 19th the following telegram was received :

NEW YORK, Oct. 19, '71.

JNO. H. RAUCH, M.D.,

Board of Health, Chicago:

Committee meet Saturday night ; send full statement.

(Signed)

FRANK H. HAMILTON, M.D.

On the 20th Oct., the following notice was published in all the city papers, English and German :

To Physicians, Sufferers by the Fire :

The Committee appointed by the physicians of Chicago, to receive and disburse contributions, forwarded by our professional brethren, for the relief of those members of the profession who have suffered by the fire, having organized, respectfully request all regular physicians in good standing, who have sustained losses in

this great calamity, to present to the Secretary, or to any member of the Committee, written statements of the amount and character of their respective losses, and of their present necessities (together with former and present addresses) in order that they may be relieved with the least possible delay, and that justice may be done to all in the distribution of this noble charity.

DE LASKIE MILLER, M.D.,
No. 518 Wabash Ave., *Chairman*.
N. S. DAVIS, M.D.,
No. 797 Wabash Ave., *Treasurer*.
T. D. FITCH, M.D.,
No. 296 W. Monroe St.
ERNST SCHMIDT, M.D.,
No. 385 State St.
WALTER HAY, M.D.,
No. 384 Michigan Ave., *Secretary*.

On the same evening, Oct. 20, Drs. Edgar and Hermann, the Committee appointed by the profession of St. Louis, arrived, bringing the first material aid to the sufferers, to the amount of (\$900) nine hundred dollars, which was distributed by themselves, after consultation with the Committee, in eighteen checks of (\$50) fifty dollars each, to an equal number of physicians who were deemed by the Committee, from the best information in their possession, to be in the most pressing want. These were placed on the following day, Oct. 21, in the hands of the Secretary (Dr. Hay) for distribution, the checks being drawn to the order of the beneficiaries respectively, and signed by the chairman of the St. Louis Committee.

On the 25th of October, the Committee were cheered by the receipt of the following letter:

NO. 43 W. 32D ST., NEW YORK, Oct. 22d, '71.

My Dear Doctor:

We have received from the medical men and medical students of this city \$4,700 and a little over, (and we hope this sum may be increased) in aid of the doctors who have suffered by fire in Chicago. I ought, however, to mention that the "Executive Committee" has authorized its chairman, Dr. Peaslee, and Dr. Hubbard, together constituting a "sub-Committee," to divert a portion of this money according to their discretion, to such physicians in other parts of the Northwest as have suffered from the recent fires. They also desire that, in disposing of the money sent to you from us, you will not overlook the claims of medical students who may have suffered in like manner. The medical students at our various medical colleges in New York have contributed very liberally to the common fund.

We are now waiting to hear from the medical men of your city, what organization they have effected, and who is authorized to receive the money.

As you, with other physicians of Chicago, have received communications both from the Pathological Society, and from a "Meeting of Physicians," of which Dr. Peaselee was chairman, it may be necessary to explain, that the action of the Pathological Society terminated, being merged into the later action of the meeting, and that both are represented by the "Executive Committee," in whose name and by whose direction I am now addressing you.

Will you be kind enough to lay these facts before the physicians of Chicago, and to request them to inform us who is authorized to receive the funds.

Very truly yours,

FRANK H. HAMILTON, M.D.,

*Chairman Executive Committee Chicago Doctors' Relief Fund
Organization, New York City.*

JNO. H. RAUCH,

Board of Health, Chicago.

On the 24th of October, a communication was received from the Academy of Medicine, Cincinnati, through Dr. C. C. Comegys, its President, enclosing the sum of - - - - - \$392
Also, one from Dr. Francis Minot, of Boston, enclosing - 10
Also, from Dr. H. Kiefe, of Detroit, - - - - - 25
Also, from Dr. Mergler, of Wheeling, Cook Co., Ill., to be given
to two of the poorest German physicians, - - - 20

By this date the number of applications for relief, sent in to the Committee, in compliance with its published notice, amounted to seventy-six. The Committee, upon consultation, decided to classify these applicants as follows :

1st. Those known, personally, or by satisfactory certificates, to be legitimate and honorable members of the profession, were placed upon the relief list ;

2nd. Those unknown and not authenticated were placed upon the reserved list for investigation ; and

3rd. Those known to be irregular, or, if regular, disreputable, were placed upon the rejected list.

The first class of this division was again subdivided into three, viz.:

1st. Men with families, who had lost residences, offices and practice, constituted the 1st class ;

2nd. Those having lost only residences or offices, and had a portion of their practice left, formed a second class ; and

3rd. Young men without dependents.

It was also decided to classify medical students in the same manner.

There was at this date in the treasury, - - -	\$447
Which was apportioned thus :	
To three physicians of the first class, \$50 each, - - -	\$150
To five of the second class, \$25 each, - - -	125
And to nine of the third class, \$10 each, - - -	90
To two German physicians \$10 each, Dr. Mergler's donation, -	20
Stationery, printing and express, - - -	5
Leaving balance in treasurer's hands, - - -	57
	<hr/>
	\$447

On Oct. 27 the following letter was received :

NEW YORK, Oct. 24, 1871.

DR. WALTER HAY—*Dear Sir :*

Enclosed you will please find my check for Two Thousand Dollars, payable to your order for the benefit of the suffering medical men of Chicago, of respectable standing in our profession. Please acknowledge the receipt of the same on reception.

(Signed)

S. T. HUBBARD, M.D.,

Treasurer, No. 27 W. 9th St.

P. S. The circular on which was printed your transactions was misdirected, otherwise the check would have been sooner sent ; more will soon be sent you.

S. T. H.

On the 28th of October, further donations were received, as follows :

From C. E. Buckingham, Boston, Mass., - - -	\$25
From the Academy of Medicine, Cincinnati, O., through Dr.	
C. C. Comegys, President, - - -	65
From Franklin Bonney, M.D., Hadley, Mass., - - -	14
	<hr/>
	\$104

At the meeting of the Committee on Oct. 28th, the number of applicants had increased to ninety-nine—of which seven had been rejected for the causes already decided upon by the Committee.

Of the ninety-two remaining, thirty-five had been already relieved as exhibited above, and to this number eighteen were added, making the total number of beneficiaries fifty-three.

To six of these, seventy-five dollars each was awarded, - - -	\$450
To one, sixty-five, - - -	65
To fifteen, fifty, - - -	750
To twelve, thirty, - - -	360
To four, twenty-five, - - -	100
To eight, twenty, - - -	160
	<hr/>
Total, - - -	\$1,885

Total receipts to date,	-	-	-	-	-	\$3,451
Total disbursements,	-	-	-	-	-	\$3,175
Balance in Treasurer's hands,	-	-	-	-	-	276
						<hr/>
						\$3,451 \$3,451

November 1, a donation was received from the Kings Co. Medical Society of Brooklyn, per Dr. J. H. H. Burge, Prest., by Prof. Moses Gunn, and by him handed to the Committee, of \$1,000. And on November 3d, the Secretary received from Dr. S. T. Hubbard, Treasurer of the New York Executive Committee, his check for \$2,000.

On Saturday, Nov. 4, the Committee met to make its third apportionment, at which time the number of applicants had increased to one hundred and twelve. The total number of rejections sixteen. Twenty-one were suspended for further examination, and the beneficiary list was increased to seventy-five, of which—

One received	-	-	-	-	-	-	\$135
Six received \$100 each,	-	-	-	-	-	-	600
Fifteen received \$45 each,	-	-	-	-	-	-	675
Ten received \$35 each,	-	-	-	-	-	-	350
Eight received \$25 each,	-	-	-	-	-	-	200
And nineteen received \$15 each,	-	-	-	-	-	-	285
							<hr/>
Total,	-	-	-	-	-	-	\$2,245
Amount received to date,	-	-	-	-	-	-	\$6,588
“ disbursed to date,	-	-	-	-	-	-	5,420
Balance in hands of Treasurer,	-	-	-	-	-	-	1,168
							<hr/>
							\$6,588 \$6,588

On November 6, a contribution was received from the German physicians of Baltimore, through Dr. A. Friedenwald, by Dr. Ernst Schmidt of this Committee, of \$132, together with Dr. Friedenwald's personal contribution, \$5. At the same date the following letter was received by Prof. Moses Gunn, and by him handed to the Committee:

17 CLINTON ST., BROOKLYN, NOV. 1, 1871.

PROF. M. GUNN—*Dear Doctor:*

Two of my colleagues in the Brooklyn Eye and Ear Hospital, Drs. Matthewson and Prout, and myself, are contributors to the fund raised by the Kings County Medical Society, for the profession in Chicago. Hearing that the

Chicago Eye and Ear Infirmary was destroyed by the fire, it would greatly please us if the sum we contributed, viz., (\$75.00) seventy-five dollars, were placed in the hands of Dr. Edward L. Holmes to assist in the continuance of his clinic.

(Signed)

H. G. NEWTON, M.D.

Dr. Newton has requested me to enclose this in the same envelope with my letter to you. It is not intended to be in any sense official. So far as the suggestion may seem to you and to your associates a wise one, it has my approval.

(Signed)

J. H. HOBART BURGE, M.D.

Accompanying the above letter was a check for \$100.

On the 23d of October, the following notice to the profession was issued in Philadelphia, of which copies were forwarded to the Committee :

PHILADELPHIA, Oct. 23, 1871.

Dear Sir:

The undersigned, a committee appointed by the Citizens' Executive Committee to aid the Chicago sufferers, earnestly request you to be present at a meeting of the profession, to be held at the Hall of the College of Physicians, N. E. Corner of Thirteenth and Locust Streets, on Wednesday, Oct. 25, at 8 P. M.

Respectfully, etc.,

(Signed)

H. LENOX HODGE, M.D., *Chairman*,
THEO. A. DEMMI, M.D.,
WM. B. ATKINSON, M.D.,
R. M. GIRVIN, M.D.,
WM. H. PANCOAST, M.D.,

WM. B. ATKINSON, M.D.,

COMMITTEE.

Secretary.

The Committee have been informed, that at the meeting called by the above circular, it was decided to add the contributions of physicians to the General Relief Fund, raised by the citizens at large in aid of the Chicago sufferers.

The Committee regret this decision of our Philadelphia brethren by which the members of their own profession here, for whose aid their contributions were largely intended, will be cut off from its benefits.

Total receipts, up to November 15,	-	-	-	-	\$6,825	
Disbursements to physicians,	-	-	-	-		\$5,425
“ for incidentals,	-	-	-	-		10
Balance in Treasurer's hands,	-	-	-	-		1,390
					<u>\$6,825</u>	<u>\$6,825</u>

The fund has been distributed specifically, up to the present date, Nov. 15, as follows. Of those to whom relief has been given—

One has received,	-	-	-	-	-	-	-	\$165
One has received,	-	-	-	-	-	-	-	145
Seven have received \$135 each,	-	-	-	-	-	-	-	935
One has received,	-	-	-	-	-	-	-	125
Thirteen have received \$100 each,	-	-	-	-	-	-	-	1,300
Four have received \$90 each,	-	-	-	-	-	-	-	360
One has received,	-	-	-	-	-	-	-	85
One has received,	-	-	-	-	-	-	-	80
Five have received \$75 each,	-	-	-	-	-	-	-	375
One has received,	-	-	-	-	-	-	-	65
Seven have received \$50 each,	-	-	-	-	-	-	-	350
Thirty have received \$45 each,	-	-	-	-	-	-	-	1,350
Three have received \$30 each,	-	-	-	-	-	-	-	90
								<hr/>
								\$5,425

November 15, received from the New York Executive Committee, per Dr. S. T. Hubbard, Treasurer, \$1,000, which leaves an unexpended balance in the Treasurer's hands of \$2,405.

W. HAY, M.D.,

Secretary.

LIST OF PHYSICIANS

Sufferers by the late Fire, October 8th and 9th, 1871.

The following list comprises the names and former and present offices and residences of physicians who have been burned out, corrected up to Nov. 15, as far as it was possible to ascertain.

1. Adam, A.—Residence, 438 N. Wells st.; office, 226 N. Clark st. All within the burnt district. Loss, total. Present location, S. Halsted st. and Canalport av.
2. Acharius, W.—Residence, 130 Townsend st.; office, 49 Chicago av. All within burnt district. Loss, total. Present location, 162 W. Harrison street.
3. Arndt, P. S.—Residence and office, 154 Madison. All in burnt district. Loss, total. Present location, 95 W. Randolph st.
4. Ashworth, Charles.—Residence and office; all in burnt district. Loss total.
5. Avery, S. J.—Residence and office, 154 Madison st.; all in burnt district. Loss, total. Present residence, 328 Walnut st.; present office, 95 W. Randolph street.

6. Baxter, A. J.—Residence, 263 Ontario st. ; office, 121 S. Clark ; all within the burnt district. Loss, total. Present residence, 185 S. Morgan ; present office, 49 S. Halsted.
7. Buckley, C. C.—Residence, 287 Illinois st. ; office, 37 Rush st. ; all in the burnt district. Loss, total. Present residence, 345 W. Randolph st.
8. Blaney, J. V. Z.—Residence, 289 Illinois st. ; office and laboratory, 143 Madison ; all in the burnt district. Loss, total. Present residence, 1025 Wabash av. ; present office, cor. State and 18th sts.
9. Barnes, Norman S.—Residence and office, cor. State and Madison ; in the burnt district. Loss, total.
10. Barnes, P. S.—Residence and office, 66 Madison ; in burnt district. Loss, total. Present residence and office, 328 W. Madison st.
11. Bogue, R. G.—Residence, 9 Washington place ; office, 100 Washington st. ; in the burnt district. Loss, total. Present office and residence, 321 W. Monroe st.
12. Blanchard, Wallace.—Office, 81 Monroe st. ; in burnt district. Loss, contents of above. Present residence and office, 265 Michigan av.
13. Brooks, J. W.—Office, 55 Clark st. ; in the burnt district. Loss, contents of office. Present residence and office, 857 Wabash av.
14. Bond, T. S.—Office, 47 S. Clark ; in the burnt district. Loss, contents of office. Present residence and office, 16 Centre av.
15. Byford, W. H.—Residence, 194 Michigan av. ; office, 62 State ; all in the burnt district. Loss, nearly total. Present residence, Cottage Grove av. ; present office, 785 Wabash av.
16. Case, L. W.—Residence, 317 Division st. ; office, Rush Medical College ; in the burnt district. Loss, total, except books, clothing and bedding. Present residence, Newberry School.
17. Cunningham, George P.—Residence and office, 129 Oak st. ; in the burnt district. Loss, total. Present residence, cor. Jefferson and Randolph streets.
18. Croskey, William.—Residence and office, 98 3rd av. ; in the burnt district. Loss, total. Present residence, 913 Indiana av.
19. Carleman, M. B.—Residence, 76 Sedgwick st. ; in burnt district. Loss, total, except some bedding and clothing. Present residence, 48 4th street.
20. Cooley, Orrin.—Residence, 374 Chicago av. ; office, 370 Chicago av. ; in the burnt district. Loss, total. Present residence and office, 260 S. Halsted street.
21. Dysart, J. W.—Residence and office, 447 N. Clark st. ; in burnt district. Loss, total. Present residence, 289 W. Randolph st.
22. Freer, J. W.—Residence, 224 Ontario st. ; office, Rush Medical College ; in burnt district. Loss, total. Present residence and office, 1045 Wabash avenue.
23. Fiske, Calom P.—Residence and office, 249 S. Clark st. ; in the burnt district. Loss, total. Present residence, 14 Willard place.

24. Geiger, Henry.—Residence and office, 250 N. Clark st. ; in burnt district. Loss, total. Present residence, 39 Archer av.
25. Gray, A. W.—Residence and office, 66 Madison st. ; in the burnt district. Loss, total. Present residence, 667 Fulton st.
26. Garvin, H. D.—Office, 169 Dearborn st. ; in burnt district. Loss, contents of above. Present office, 255 W. Madison st.
27. Hurlbut, V. L.—Residence and office, 104 Randolph st. Loss, contents of same. Present office, 364 Wabash av.
28. Herz, Cornelius.—Residence, 630 N. La Salle st. ; in burnt district. Loss, total. Present residence, 114 S. Jefferson st.
29. Hyde, James N.—Residence and office, 101 S. Clark st. ; in burnt district. Loss, total. Present office, 125 22nd st.
30. Hempstead, Charles M.—Office, 55 S. Clark st. ; in burnt district. Loss, contents of office. Present residence and office, Ashland av.
31. Hahn, James A.—Office, cor. Dearborn and Randolph sts. ; in the burnt district. Loss, contents of office. Present residence and office, 430 Michigan av.
32. Hunt, W. C.—Residence, 271 Erie st. ; office, Rush Medical College ; in burnt district. Loss, total. Present residence, 657 Monroe st. ; present office, 318 W. Madison st.
33. Hollister, J. H.—Office, 164 State st. ; in burnt district. Loss, contents of office. Present office, cor. State and 18th sts.
34. Kelly, F. W.—Residence, 250 Wabash av. ; office, 154 Washington st. ; in burnt district. Loss, total. Present residence, 96 W. Washington st.
35. Knox, W. A.—Office, 106 S. Clark st. ; in burnt district. Loss, contents of above. Present residence, 535 W. Adams st. ; present office, 185 W. Madison street.
36. Kirschstein, H.—Residence, 252 5th av. ; office, 249 S. Clark ; in burnt district. Loss, total. Present residence, 194 Cottage Grove av. ; present office, 394 S. Clark st.
37. Leonard, R. L.—Residence, 179 Huron st. ; office in Mariner's Chapel ; in burnt district. Lost, almost total. Present residence, 139 N. Morgan street.
38. Lyman, W. C.—Office, 119 S. Clark st. ; in burnt district. Loss, contents of above.
39. Loverin, N.—Residence and office, 208 Randolph st. ; in burnt district. Loss, total. Present residence, 146 W. Jackson st.
40. Leslie, S.—Residence and office, 190 S. Clark st. ; in burnt district. Loss total, excepting \$200 of clothes and instruments. Present residence, 387 State street.
41. McDonald, P. S.—Office, cor. Clark and Harrison sts. ; in burnt district. Loss, office and contents. Present office, 351 S. Clark st.
42. McArthur, J. D.—Residence and office, 234 Dearborn st. ; in burnt district. Loss, total. Present office, 50 W. Madison st.
43. Mackey, H. A.—Residence, 272 Indiana st. ; in burnt district. Loss, total. Present residence, 760 State st.

44. Morgan, A. G.—Residence, 101 Huron st. ; in burnt district. Loss, total, except a little furniture in damaged condition. Present residence, 246 Fulton st.
45. Martin, William.—Residence and office, 112 Randolph ; in burnt district. Loss, total. Present residence and office, 589 Wabash av.
46. Maynard, Wm. J.—Residence at Marine Hospital ; office, 21 Washington st. ; in burnt district. Loss, total. Present residence and office, 424 W. Van Buren street.
47. Merriman, H. P.—Office, cor. State and Monroe ; in burnt district. Loss, contents of above. Present office, 785 Wabash av.
48. O'Ryan, Charles D. B.—Residence, 248 N. Wells st. ; in burnt district. Loss, total. Present residence, Jefferson, Cook Co.
49. Parkes, Charles T.—Residence, 224 Ontario st. ; office, Rush Medical College ; in burnt district. Loss, total. Present residence, 462 Elston av. ; present office, 121 22nd st.
50. Powell, Edwin.—Residence and office, 45 S. Clark st. ; in burnt district. Loss total. Present office, 318 W. Madison st.
51. Price, O. J.—Residence, 65 W. Van Buren st. ; in burnt district. Loss, total. Present residence, 92 W. Van Buren st.
52. Reed, John.—Residence, 15 Washington place ; burnt district, North side. Loss, total. Present office, 273 W. Randolph st.
53. Simpson, John.—Residence, No. 6 W. Oak st. ; in burnt district. Loss, total. Present residence, 166 Curtis st.
54. Smith, H. R.—Residence, 167 S. Clark st. ; in burnt district. Loss, total. Present residence, 1100 Indiana av.
55. Scheppers, D. Q.—Residence, 292 Larrabee st. ; in burnt district. Loss, total. Present residence, 157 Mather st.
56. Savage, A. C.—Residence and office, 233 Madison st. ; in burnt district. Loss, total. Present residence, 133 W. Madison st.
57. Schwarz, H.—Residence, 184½ S. Clark st. ; office, 41 N. Clark st. ; in burnt district. Loss total. Present residence, 62 Milwaukee av.
58. Sherman, Julien S.—Residence, 297 Wabash av. ; office, 81 Monroe st. ; in burnt district. Loss, total.
59. Starkweather, Ralph E.—Office, 169 Dearborn st. ; in burnt district. Loss, contents of above. Residence and office, 368 Michigan av.
60. Smith, Charles G.—Residence and office, 169 Dearborn st. ; in burnt district. Loss, total. Present office, 400 16th st. and 229 W. Madison.
61. Thibodo, R.—Residence and office, 41 N. Clark street ; in burnt district. Loss, total. Present residence, 125 N. Desplaines st.
62. Thompson, D. D.—Office, 169 Dearborn st. ; in burnt district. Loss, office and contents. Present and former residence, 37 Myrick av.
63. Teare, John.—Residence, 129 Huron st. ; in burnt district. Loss, total. Present residence, 152 N. Sangamon st.
64. Trimble, D. B.—Residence, Geneva, Wisconsin ; office, 156 N. Clark st. ; office in burnt district. Loss, a few books. Present office, 119 22nd st.

65. Varges, L.—Residence and office, 680 Sedgwick st. ; in burnt district. Loss total. Present residence, 159 Cottage Grove av.
66. Van Doozer, B. R.—Residence, 122 3rd av. ; office, 112 oMnroe st. ; in burnt district. Loss, total. Present residence, 420 Burnside st. ; present office, 120 S. Halsted st.
67. Weeks, J. F.—Residence and office, No. 118 S. Clark st. ; in burnt district. Loss, total.
68. Wagner, William.—Residence 363 N. Clark st. ; office, 28 N. Clark st. ; in burnt district. Loss, total. Present residence, 295 W. Lake st.
69. Williams, J. F.—Residence, 121 Lincoln av. ; office, 156 N. Clark st. ; in burnt district. Loss, total. Present residence, 62 Grant place.
70. Ware, Lyman—Office, 169 Dearborn st. ; in burnt district. Loss, content, of office, library and instruments. Present office, 388 State st.
71. Young, Fern—Residence and office, 184 S Clark st. ; in burnt district. Loss, total. Present residence, 204 W. Madison.

Secretary's Office of the Illinois State Medical Society, }
T. D. FITCH, M.D., Sec., 296 W. Monroe st. }

To the Members of the Illinois State Medical Society :

GENTLEMEN—The Transactions of this Society were nearly ready for distribution, but yet in hands of the publishers at the time of our great fire. The publishers lost everything, and the State Medical Society their transactions for this year. Nothing was saved except a copy of the proceedings which was in our hands and a few of the articles and reports that had been published in the medical journals, and others in pamphlet form by their authors. We shall at once put these into type again, and obtain, if possible, duplicate copies of all the unpublished reports from their authors.

We ask the indulgence of the Society for our seeming tardiness in issuing the Transactions, but many circumstances which seemed beyond our control conspired to delay the issue. We have made direct application to the authors of all unpublished papers, and hope to be able to issue nearly, if not quite, a complete copy within the next thirty days.

In behalf of the Committee on Publication.

T. D. FITCH, M.D.

Reunion of the Alumni of the Jefferson Medical College.

The Alumni Association of the Jefferson Medical College proposes to hold a social reunion during the meeting of the American Medical Association in Philadelphia, in May next. The Alumni of the College are cordially invited to attend.

Those who expect to be present are requested to send their names and addresses to either of the undersigned Secretaries.

J. EWING MEARS, M.D., 222 S. 16th St.

R. J. DUNGLISON, M.D., 636 N. 18th St.

Prize Essay on "Diseases of Children"—Open for Universal Competition.

The President of the Medical Society of the county of New York, Dr. Abraham Jacobi, has placed in the hands of its Treasurer four hundred dollars, to be awarded for the best essay on "A History of the Diseases of Infancy and Childhood in the United States, and of their Pathology and Therapeutics."

Competitors will send their essays in English, with motto attached, and the name and address of the writer, with the same motto, in a sealed envelope, to the present Secretary of the Society, Dr. ALFRED E. M. PURDY, 123 East Thirty-Eighth street, New York, on or before January 1st, 1873.

The committee are authorized by the society to withhold the prize if the essays submitted should not merit it.

Austin Flint, M.D., Ernst Krackowizer, M.D., Edward S. Dunster, M.D., Committee.

